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MEASUREMENTS (NASA) 77 p

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Sea Remote Sensing Program
MISSISSIPPI SOUND REMOTE SENSING STUDY JULY 6, 1972
Surface Measurements



MANNED SPACECRAFT CENTER

MISSISSIPPI SOUND V REMOTE SENSING STUDY
PRINCIPAL INVESTIGATOR - DR. B. H. ATWELL

PARTICIPANTS

Alabama Department of Conservation
Gulf Coast Research Laboratory
Marine Science Institute, University of Alabama
National Marine Fisheries Service
U. S. Corps of Engineers - Mobile, Alabama
U. S. Corps of Engineers - New Orleans, Louisiana

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LIST OF MAPS

LIST OF MAPS

(Back Pocket)

1. Mississippi Sound V Flight Line and Station Map.
2. Mississippi Sound V Surface Water Temperature Contour Map
June 29, 1972.
3. Mississippi Sound V Salinity Contour Map
June 29, 1972.
4. Mississippi Sound V Chlorophyll Station Map (Insufficient Data for Contours).
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INTRODUCTION

As a part of the remote sensing program of the NASA Earth Resources Laboratory (ERL), a study of the Mississippi Sound was initiated in early 1971. The first phase of this study consisted of four overflights by NASA aircraft with supporting surface measurements. Reports summarizing the surface data collected for each of the overflights - July 22, 1971, November 10, 1971, January 26, 1972 and May 2 and 4, 1972 - have been published by the NASA Earth Resources Laboratory.

The study has now entered a second phase in participation with the National Marine Fisheries Service (NMFS) ERTS-A experiment #240¹ in which additional scientific objectives have been included. One of the objectives is the assessment of the influences of physical parameters on the menhaden fishery in within Mississippi Sound and in nearby waters of the Gulf of Mexico and how effectively these parameters may be measured remotely. The other is the inclusion of data obtained from the ERTS-A satellite in the evaluation of remote measurements. In addition to the direct support of the ERTS-A experiment, the ERL effort will also support an ongoing evaluation and demonstration of remote sensing techniques in the Mississippi Sound area emphasizing the measurement of a set of basic oceanographic parameters in coastal waters. The major parameters of interest are salinity, temperature, chlorophyll and turbidity.

This report includes the surface measurements made in support of the first aircraft overflight of the second phase of the study. The NASA aircraft used was the C-130 with the 24 channel multi-spectral scanner collecting the remotely sensed data. In addition, a light aircraft leased by the NASA Earth Resources Laboratory collected infrared scanner, photographic and visible spectra radiometric measurements of the sea surface. A second light aircraft leased by the National Marine Fisheries Service collected color photography. The remotely sensed data collected will be reported separately.

Because of the interest in the distribution of the menhaden fisheries throughout the Mississippi Sound, the area was divided into five areas (A-E), and depending on the location of the fishing fleet a denser set of surface measurements was planned to be made in one of these

¹Project Plan - ERTS A Experiment dated July 21, 1972..

sections than the other four. The mission was planned for June 29, 1972, and surface measurements were made. Because of unsuitable weather conditions no remote measurements were made on this day. All surface measurements made on this day are recorded in Table 2. The water samples collected were not analyzed for chlorophyll content due to the large work load involved and the plan to gather similar data the following day.

The mission was rescheduled for June 30. Only an abbreviated surface measurement effort was undertaken, because of difficulties in obtaining surface measurement boats. The measurements made are found in Table 3. Cloud conditions existing on June 30 made it impossible to collect useful remotely sensed data. The C-130 left New Orleans for Houston and plans were made to conduct the mission during the following week.

On July 6, surface measurements were made in section "C" only. These are recorded in Table 4. The weather was good and the C-130, the ERL leased aircraft, and the aircraft leased by the NMFS all collected data.

The surface measurements were made and water samples collected by personnel from the list of participants shown on the cover page. These agencies made available both personnel and equipment. Salinity and chlorophyll measurements were made by Lockheed Electronics Company personnel, support contractor to the Earth Resources Laboratory. Jerry Brashier, James Halbach and Arthur Ralph Mason, Jr., of Lockheed Electronics Company compiled this report. The contour maps were drawn by G. K. Stuckey and Ernst W. Zwart.

MATERIALS AND METHODS

Field Procedures

Field measurements and samples were taken at one-hundred stations in the Mississippi Sound during June 29, June 30, and July 6 as ground truth for the mission (Tables 2-4).

On previous missions forty to fifty boats were used in taking the surface measurements. With this number of boats it was possible, at least in theory, to have each boat on station at the time of overflight. For this mission a different surface measurement plan was used. Each boat was assigned a certain section with a given number of stations to occupy in a serial manner. However, some of these stations were occupied twice during the exercise to allow some assessment of changes which took place during the day. This system greatly reduced the number of boats required.

Surface water temperature measurements were made by taking a bucket sample and immediately immersing a mercury bulb thermometer in the center of the bucket.

Air temperature measurements were taken with mercury bulb thermometer as near the water surface as possible on the shady side of the boat.

Relative humidity values were determined with sling psychrometers.

Wind direction, wind speed, and sea state observations were in most cases estimated.

Water transparency was determined with secchi disks.

Surface current speed and direction were measured at most stations. Two methods were used. Impellar type current meters were used at a few stations. At the other stations a neutrally buoyant float with minimum freeboard (partially filled plastic bottle) was attached to a 75 foot cord. The time required for the float to reach the end of the cord after being dropped from the anchored boat was measured. A velocity was computed by knowing the length of the cord and the elapsed time.

The time (CDT) of flyover on July 6, 1972 for each flight line was:

Line C-1 - 1600-1603

Line C-3 - 1606-1611

Line C-3 - 1615-1619

Line C-4 - 1622-1626

Line C-5 - 1630-1635

Line C-6 - 1639-1643

Line 1 - 1715-1736

Line 17 - Target Farm - 0924-0933

Line 16 - Target Farm - 0938-0948

MATERIALS AND METHODS

Field Procedures (Cont'd)

National Weather Service Meteorological Observations are represented by figures 1 and 2 . A radiosonde at Mississippi Test Facility on 6 July 1972 is shown in figure 3 .

Tide measurements recorded by the U. S. Corps of Engineers, Mobile, Alabama are shown in figures 4-10.

Data computations and listings for this mission were made with the Univac 1108.

Below is a nomenclature list.

<u>Column</u>	<u>Abbreviation</u>	<u>Name</u>
1	STAT NUMB	Station number
2	TIME CDT	Time Central Daylight
3	WATER TEMP DEG C	Water temperature degrees centigrade
4	CHLO PH A MG/M3	Chlorophyll A milligrams per cubic meter
5	SALNTY PTS/K	Salinity parts per thousand
6	AIR TEMP DG C	Air temperature degrees centigrade
7	RELAT HUMDY PERCT	Relative humidity percent
8	WIND DIR DEG	Wind direction degrees
9	WIND SPD KN	Wind speed knots
10	SECH VISB FT	Secchi Visibility Feet
11	SEA STAT FT	Sea station feet
12	CURRT KN	Current knots
13	CUR DIR DEG	Current direction degrees
14	WATER DEPTH FT	Water depth feet
15	BOTL NO.	Bottle number
16	REMARKS	Remarks

MATERIALS AND METHODS

Laboratory Procedures

Water samples were taken at each station in pint polypropylene bottles for chlorophyll and salinity analyses.

Salinities were run with a Beckman Model RS-7B Induction Salinometer. Standard (35 ‰) sea water was used as reference, and salinities were determined from the conductivity ratio of the sample to that of the standard. Temperature and instrument drift corrections were made according to the Beckman Manual.

The technique used for determination of chlorophyll, which gives a measure of the phytoplankton present, was essentially that proposed by SCOR-UNESCO working group 17 in Determination of Photosynthetic Pigments in Sea-Water, UNESCO, Paris 1969.

Each water sample for chlorophyll analysis was filtered through a millipore 0.45 micron acetate filter. The filters and their residue were stored at -15° C over activated silical gel. Each filter and its residue was ground in a teflon tissue grinder. Ninety percent acetone was used as the extracting agent. The acetone homogenates were stored in the dark for ten minutes, then centrifuged at 2000 g for approximately one hour instead

of the recommended ten minutes because the extract was too turbid. The volume of each extract was recorded and the absorption spectrum of the chlorophyll extract measured against a blank acetate filter dissolved in 90% acetone. The measurements were made on a Cary 17 Spectrophotometer.

The absorption spectra were indexed at 750, 663, 645 and 630 m μ . The absorption at 663, 645 and 630 m μ was corrected by comparison with the absorption of the "reference blank" at 750 m μ . These corrected values are used in the following formula to determine chlorophyll A.

$$\text{chl A} = (11.64 \times e_{663} - 2.16 \times e_{645} + 0.10 \times e_{630}) \times \frac{\text{ext (ml)}}{\text{vol (l)}} \times \frac{1}{\text{absorption cell light path (cm)}}$$

where e_{663} = absorption at 663 m μ

e_{645} = absorption at 645 m μ

e_{630} = absorption at 630 m μ

ext = extract volume

vol = volume of sample

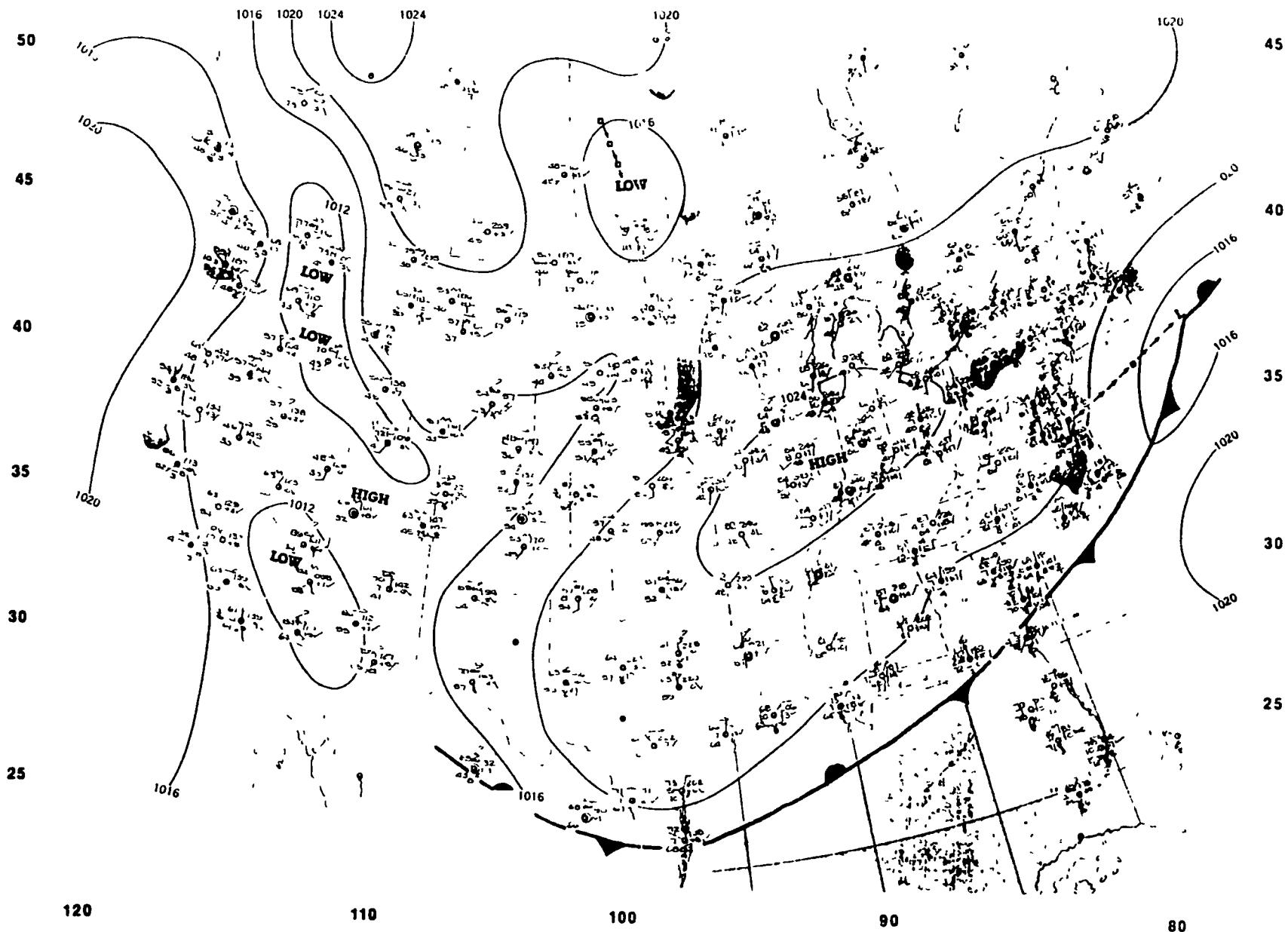
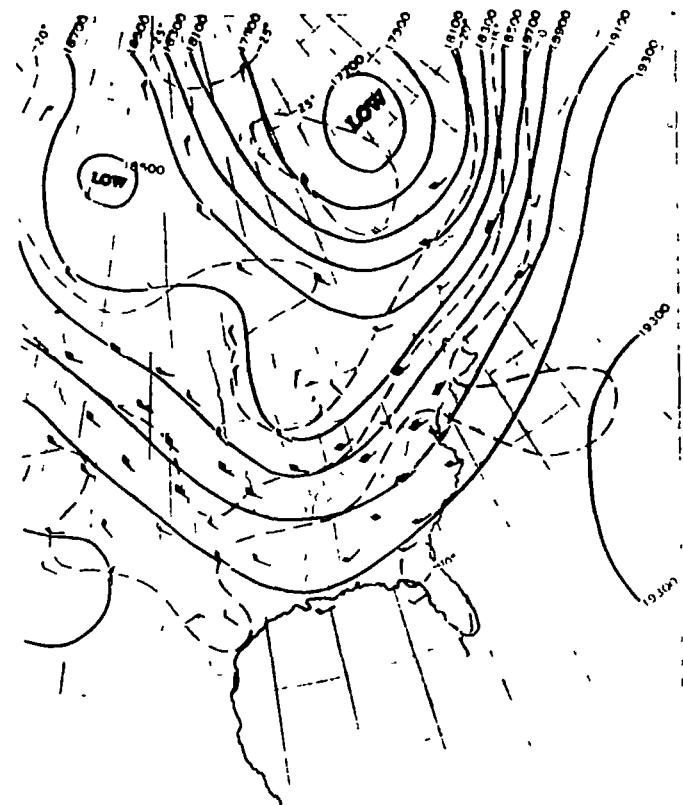
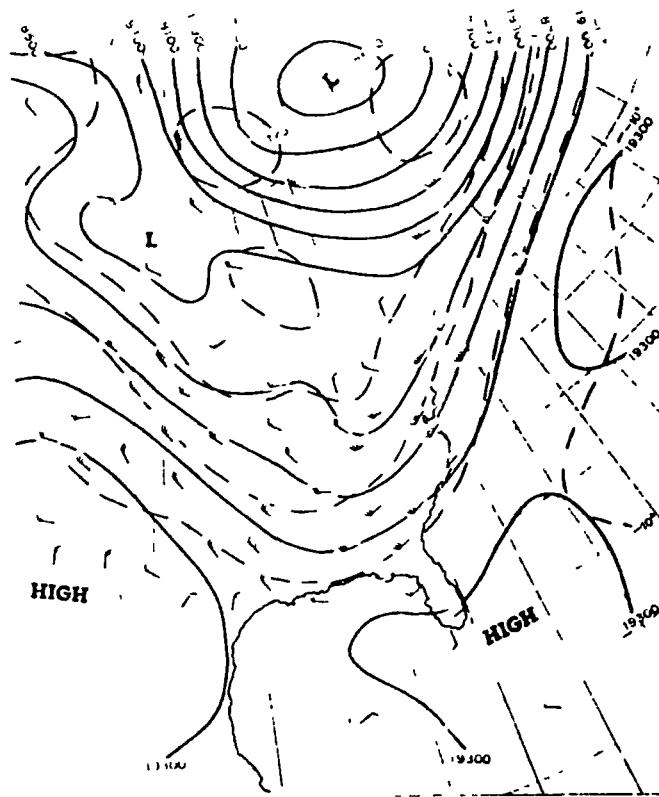


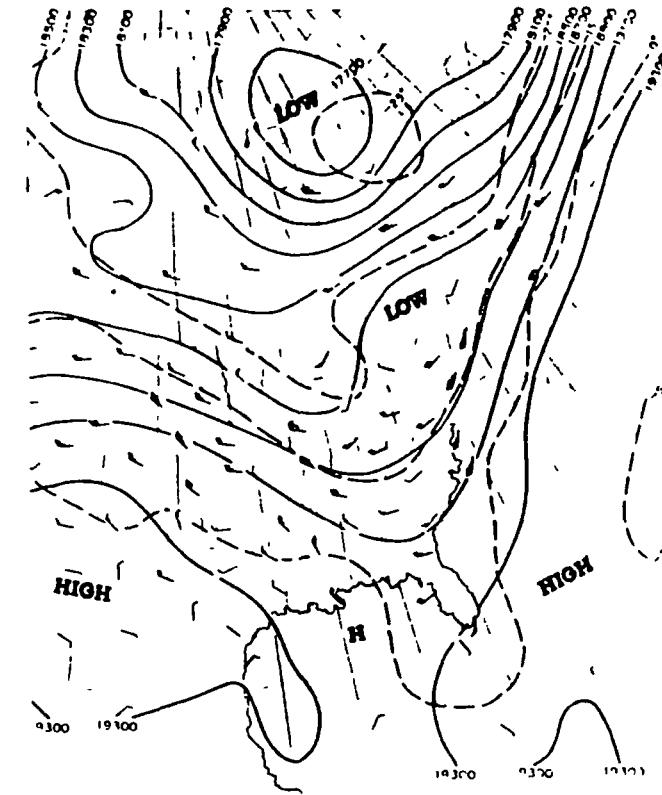
FIGURE 1. NATIONAL WEATHER SERVICE
SURFACE WEATHER MAP AND
STATION WEATHER AT 0000 GMT
THURSDAY, JULY 6, 1972



0000 GMT 5 JULY 1972



0000 GMT 6 JULY 1972



0000 GMT 7 JULY 1972

FIGURE 2.

NATIONAL WEATHER SERVICE
500- MILLIBAR HEIGHT CONTOURS

<u>PRESSURE</u>	<u>TEMP.</u>	<u>DEW POINT</u>	<u>HEIGHT</u>
<u> MILLIBARS</u>	<u>CENTIGRADE</u>		<u>METERS</u>
1019.0	24.0	16.7	0
996.0	20.3	11.2	198
991.9	20.1	11.3	233
982.0	19.7	11.4	320
969.0	19.9	11.4	435
961.5	19.4	11.0	501
932.4	17.6	9.4	765
922.0	16.9	8.9	862
905.2	16.6	7.6	1019
900.0	16.5	7.2	1068
877.7	14.9	7.1	1280
857.0	13.5	7.0	1483
850.9	13.3	6.7	1542
825.6	12.4	5.7	1797
812.0	11.9	5.2	1937
800.3	11.0	4.6	2056
775.1	8.9	3.4	2323
756.0	7.3	2.4	2531
750.4	7.4	1.2	2592
739.0	7.6	-1.3	2719
725.3	6.4	-2.4	2871
701.2	4.1	-4.4	3148
693.0	3.3	-5.1	3244
677.7	4.9	-16.3	3426
675.0	5.2	-18.3	3459

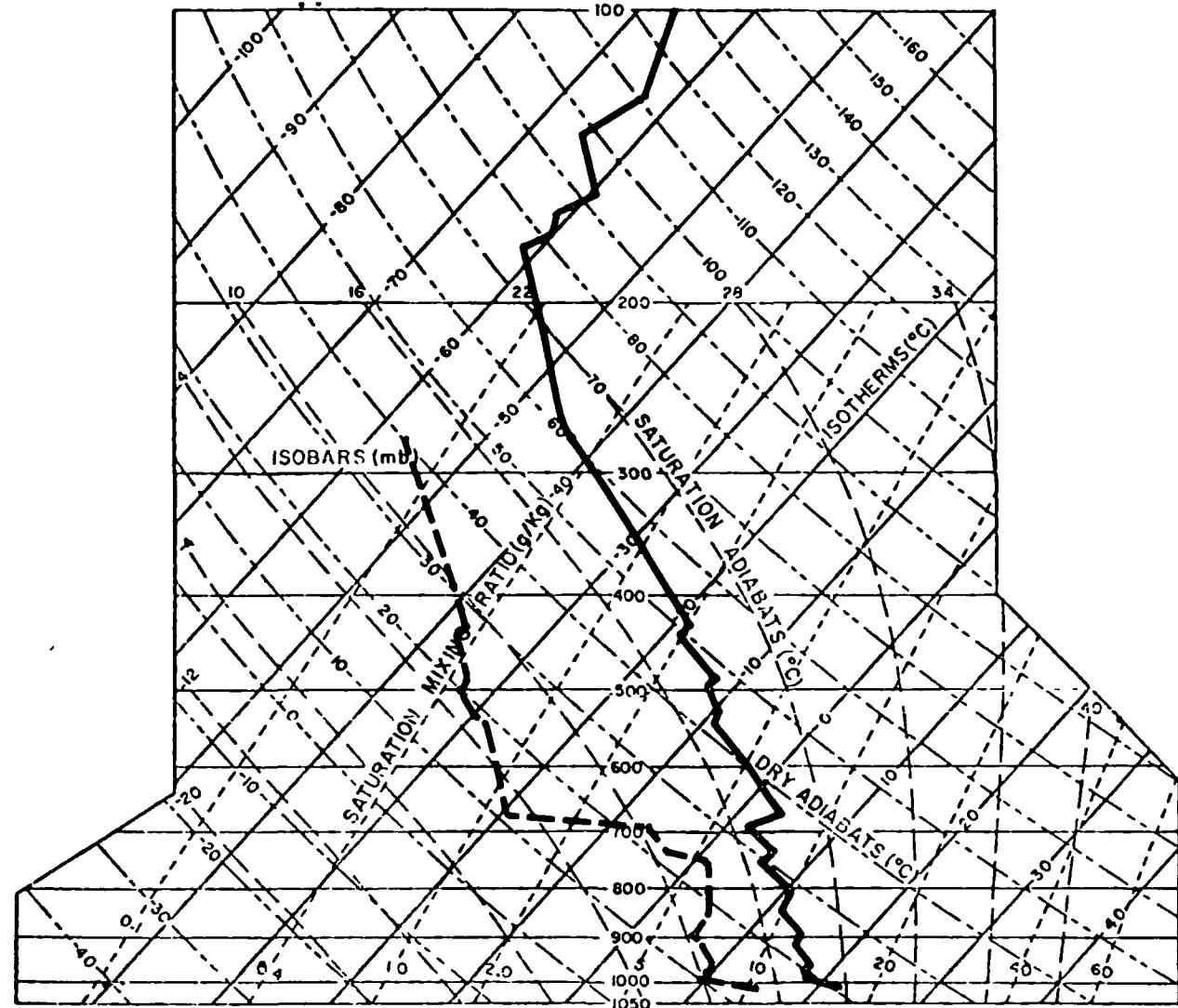


FIGURE 3.

Machine processed radiosonde data available from
Mississippi Test Facility 1405 GMT, 6 July 1972

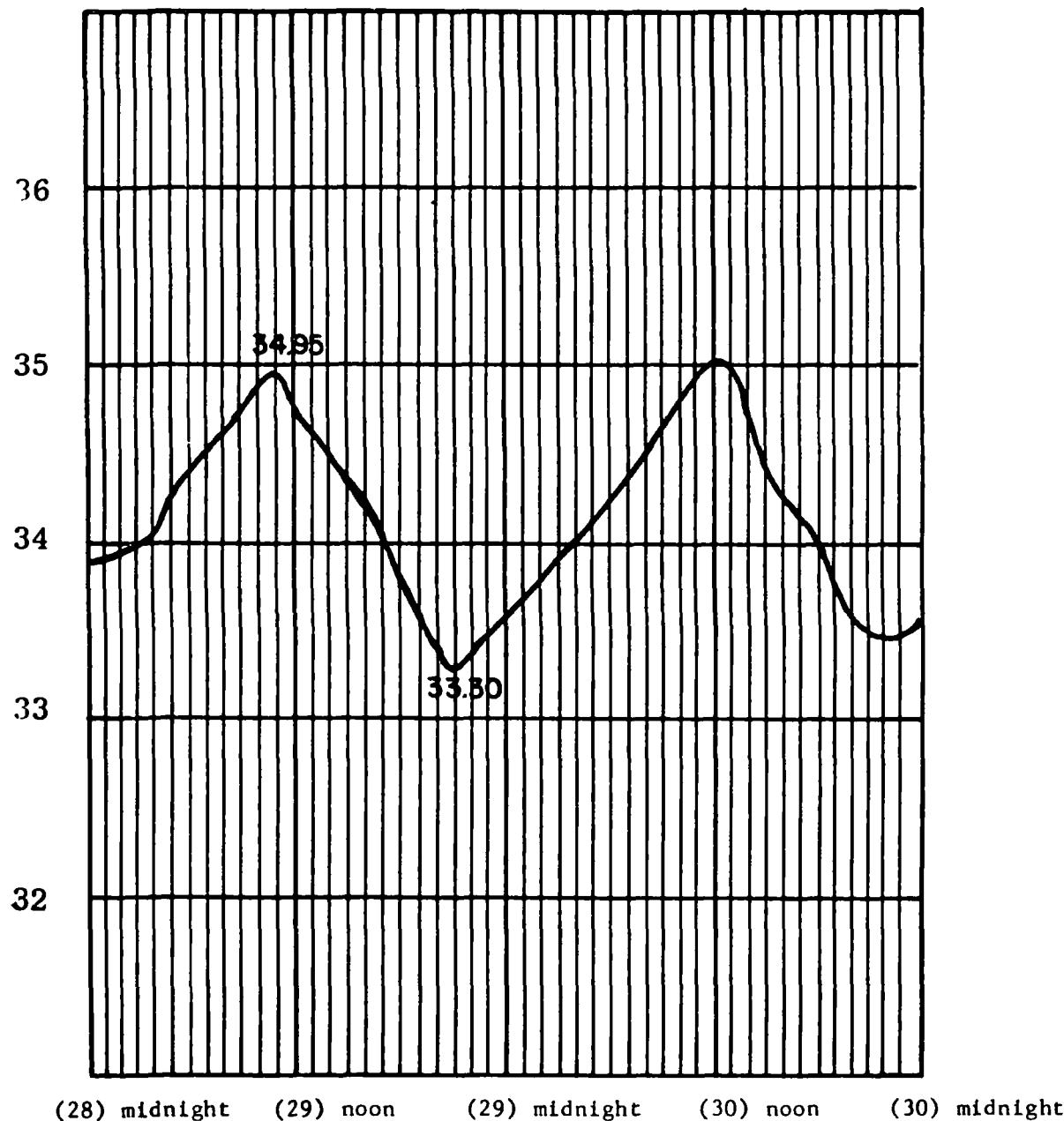


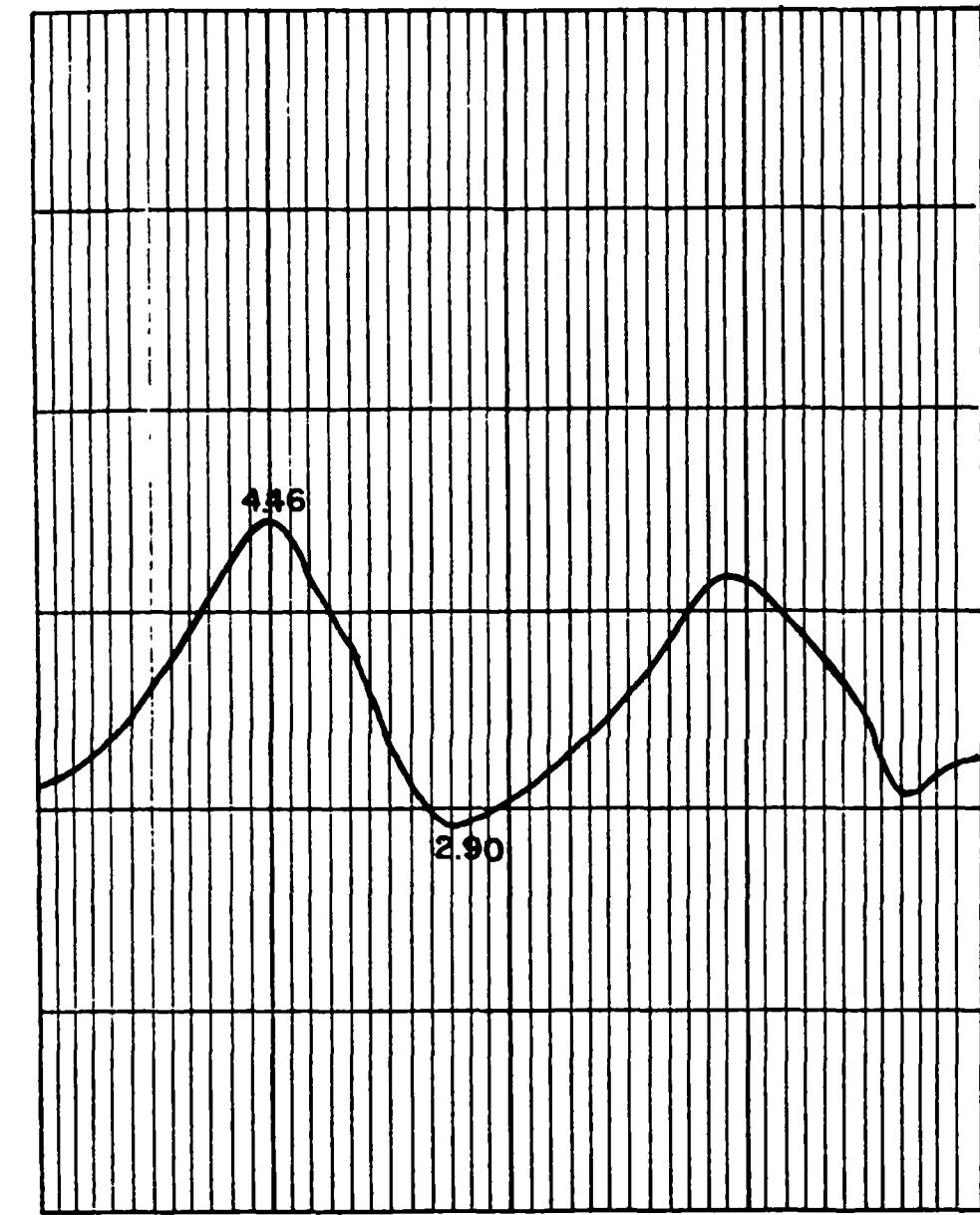
FIGURE 4.

Bon Secour, Ala.

Gage Zero -33.50

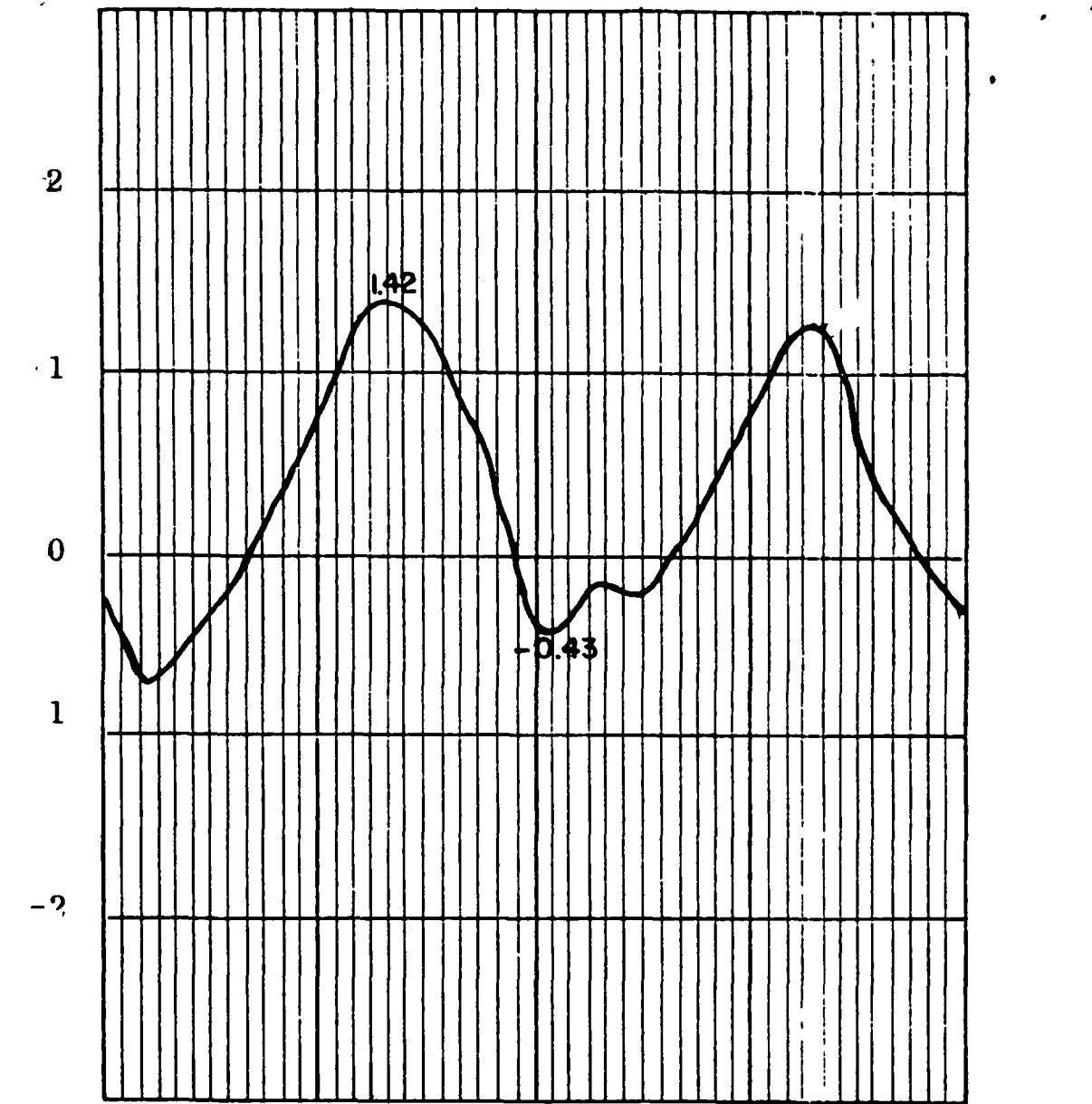
28, 29, 30 JUNE 1972

(Source Mobile Corps of Engineers)



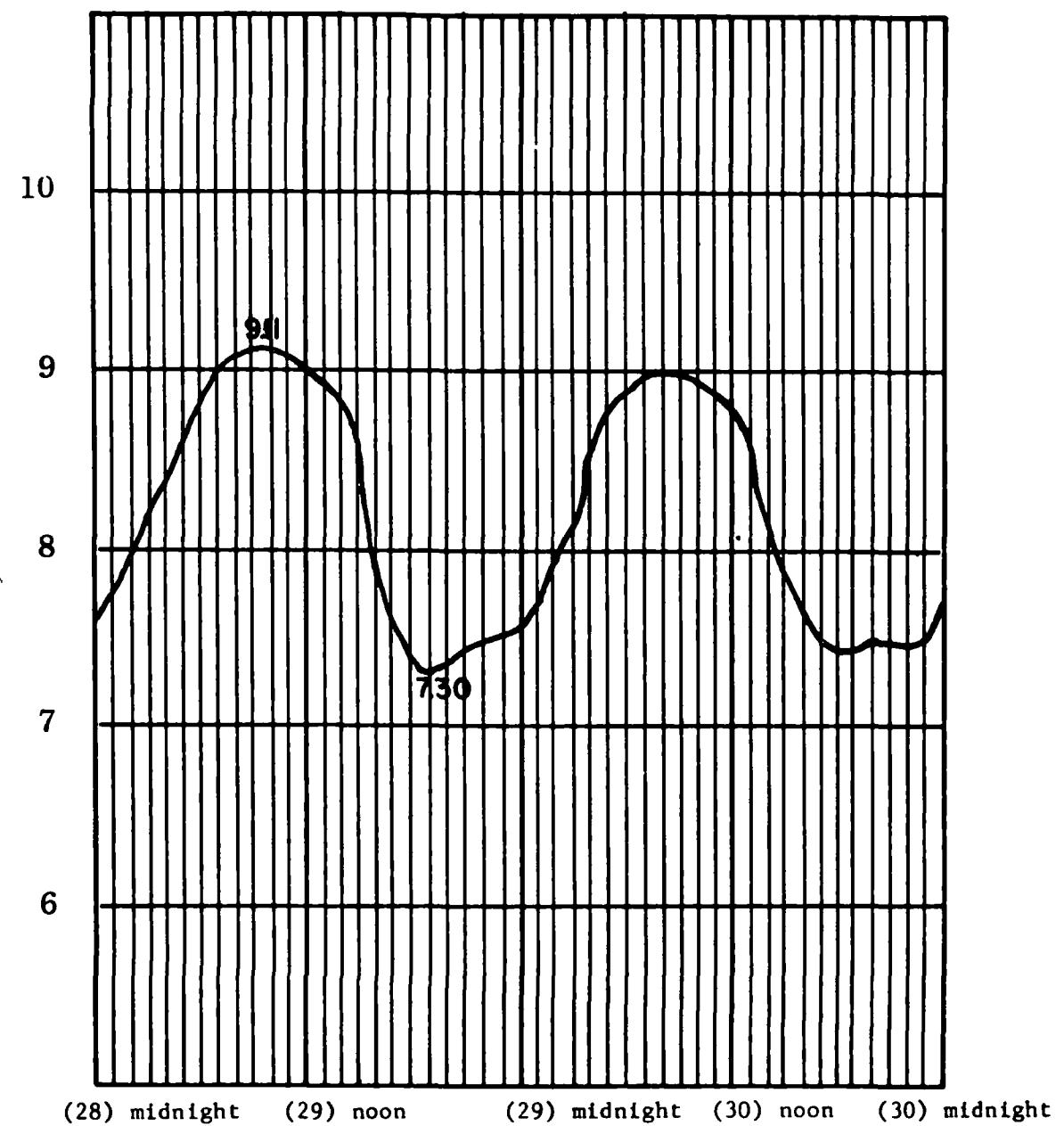
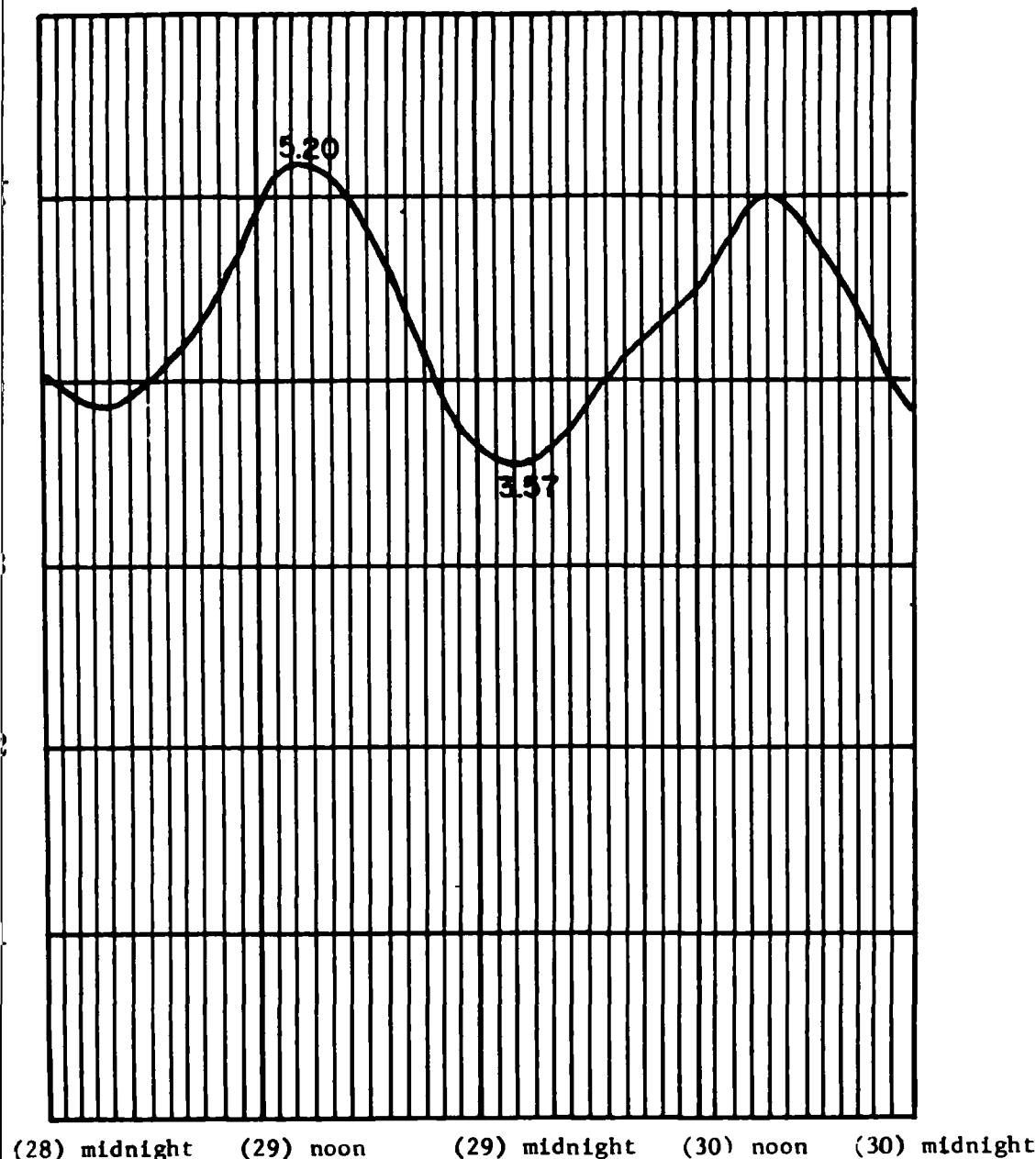
Cedar Point, Ala.
Gage Zero 3.00

Cedar Point, Ala. and Gulfport,
Miss.
28, 29, 30 June 1972

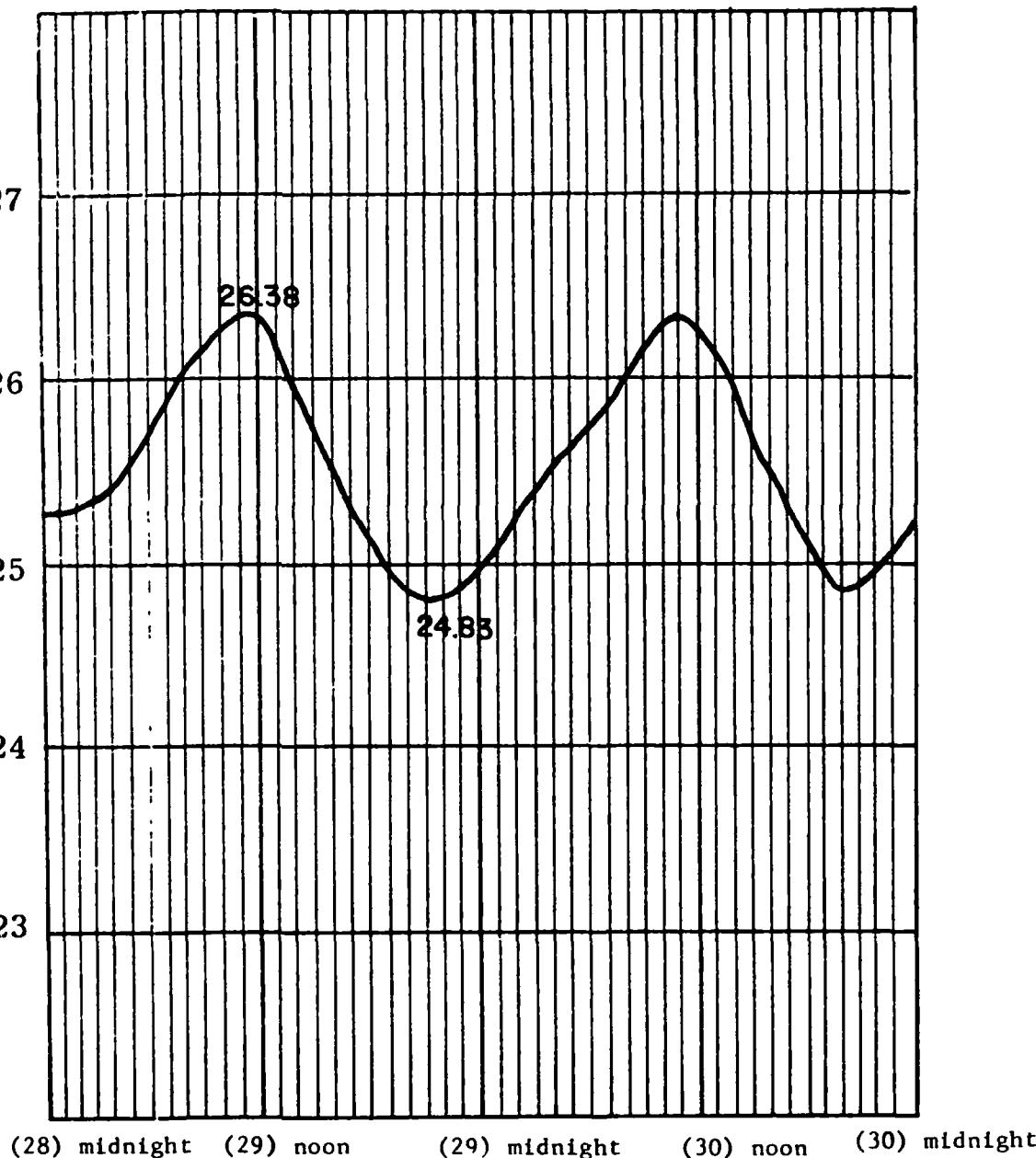


(Source Mobile Corps of Engineers)

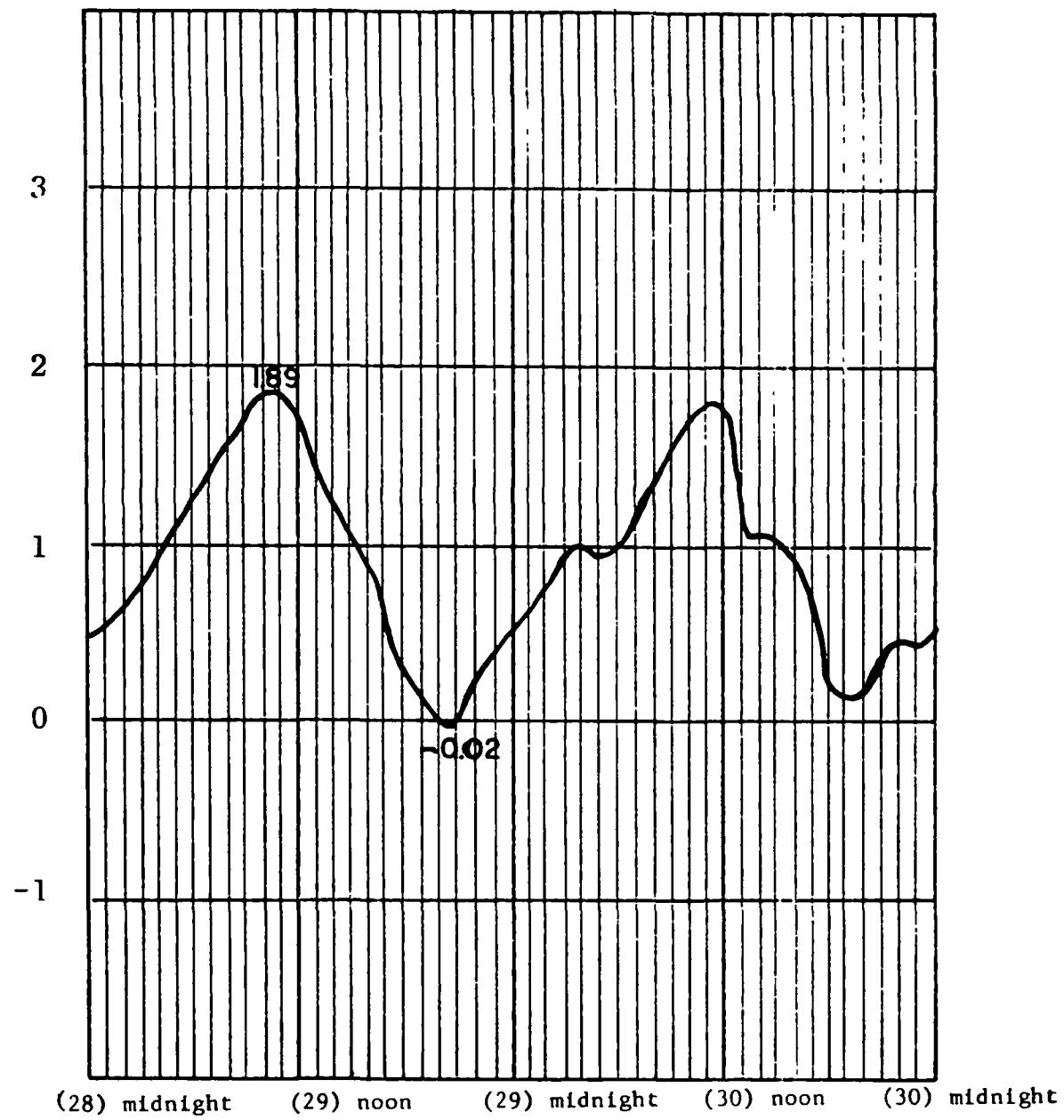
FIGURE 5.



Dauphin Is. Pier, Ala.
Gage Zero 7.57
(Source Mobile Corps of Engineers)



Point Clear, Ala.
Gage Zero -25.29

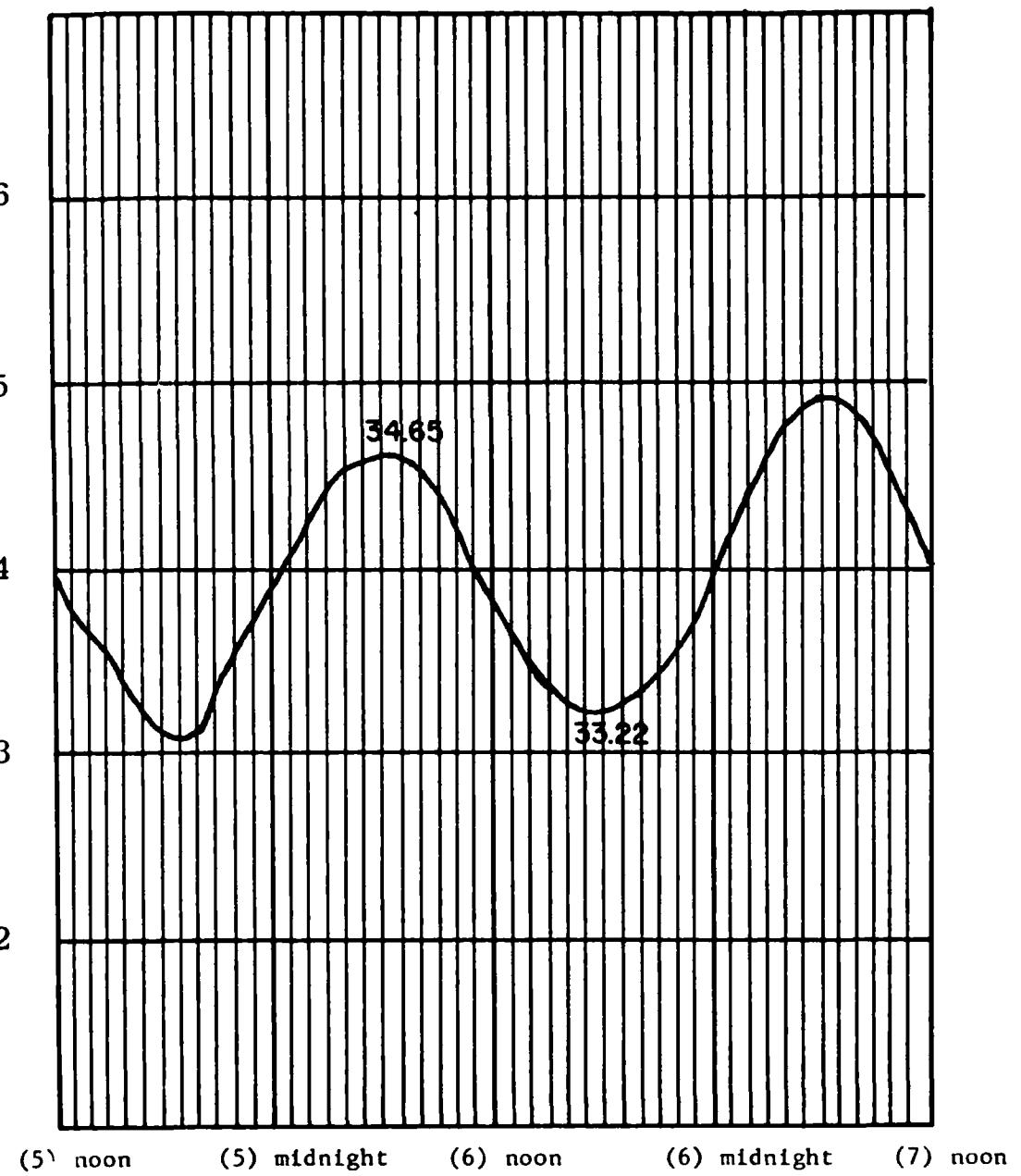


Point Clear and Dauphin
Island State Lab, Ala.
28, 29, 30 June 1972

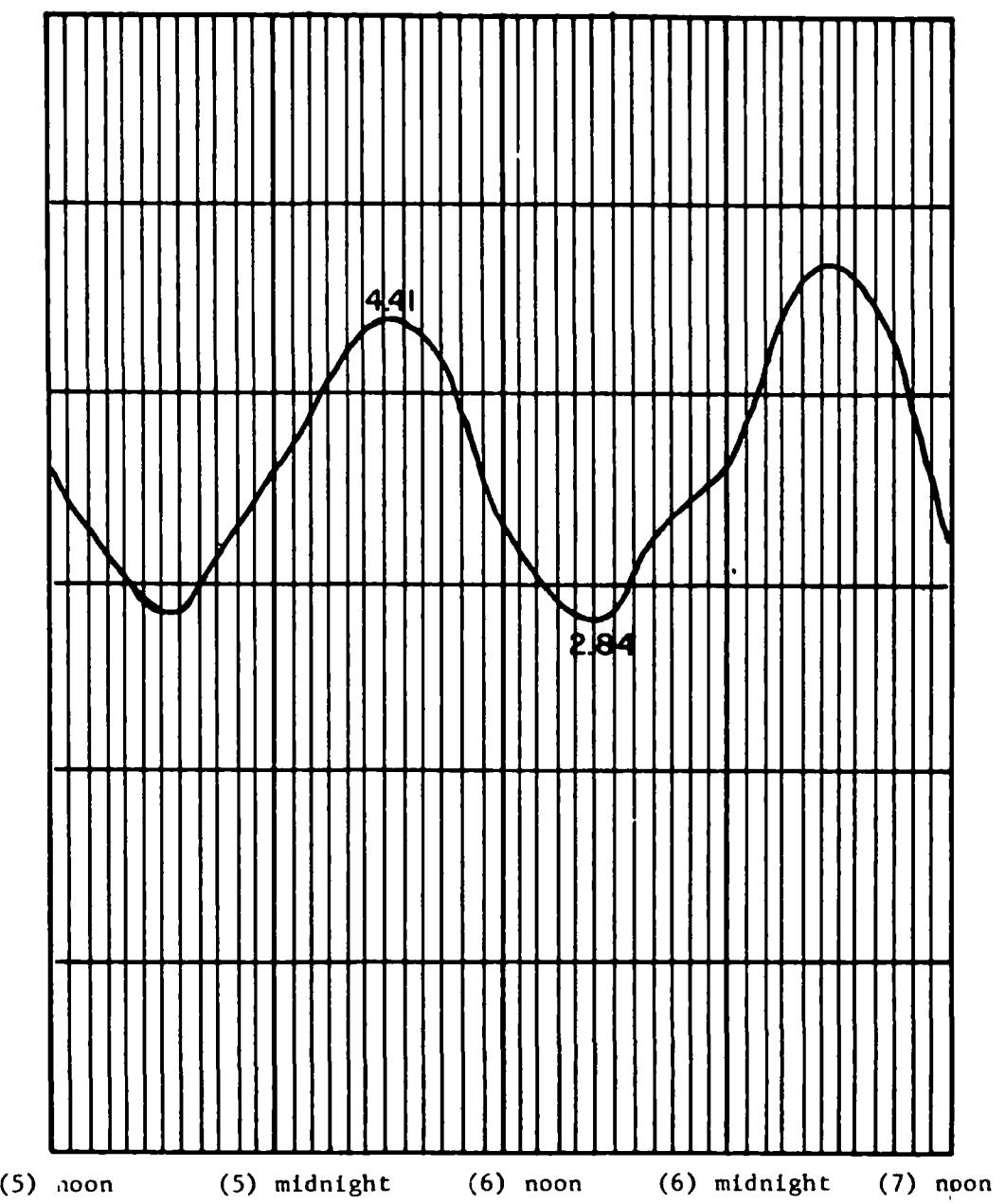
Dauphin Island State Lab, Ala.
Gage Zero 0.23

FIGURE 7.

(Source Mobile Corps of Engineers)

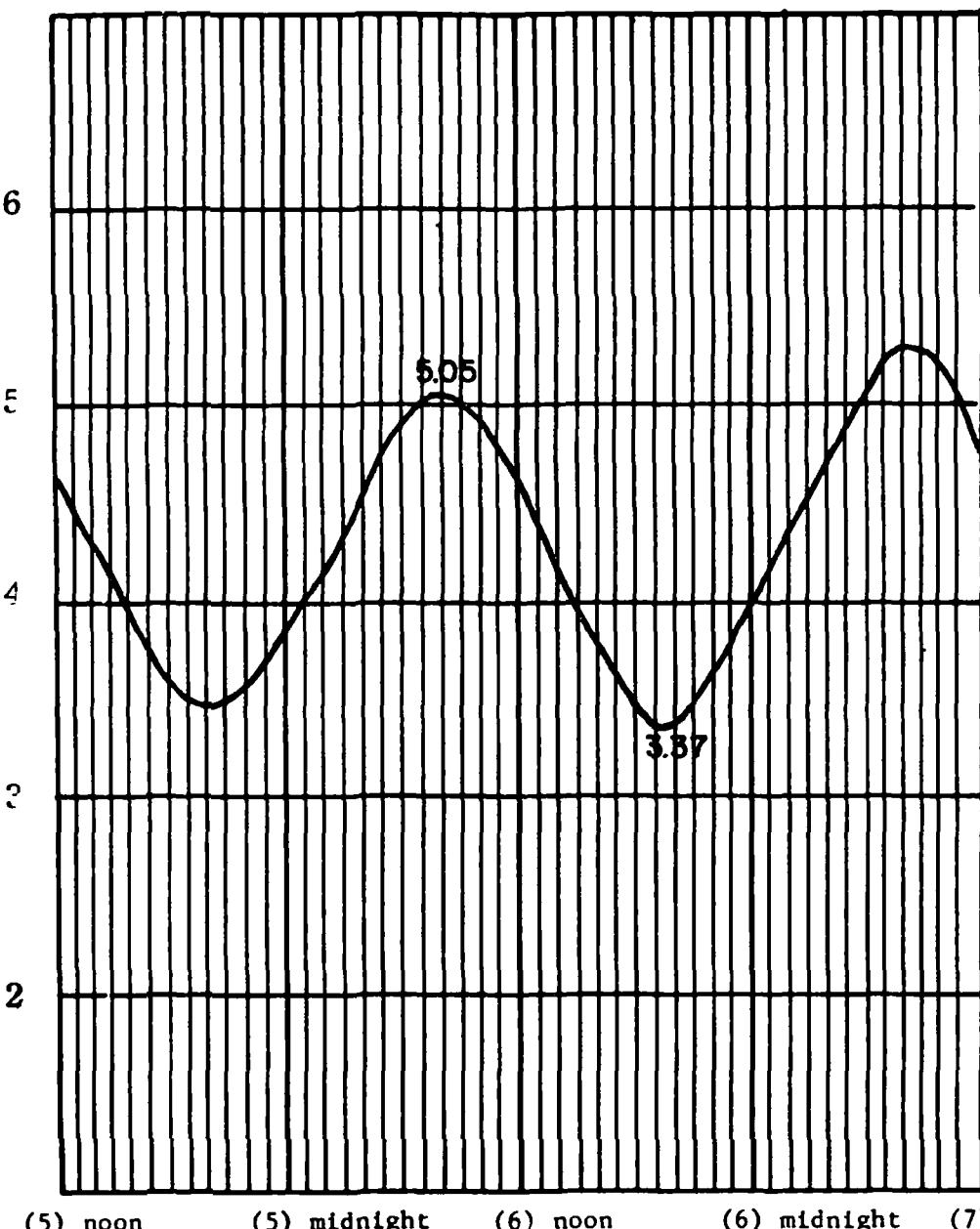


Bon Secour, Ala.
Gage Zero -33.55

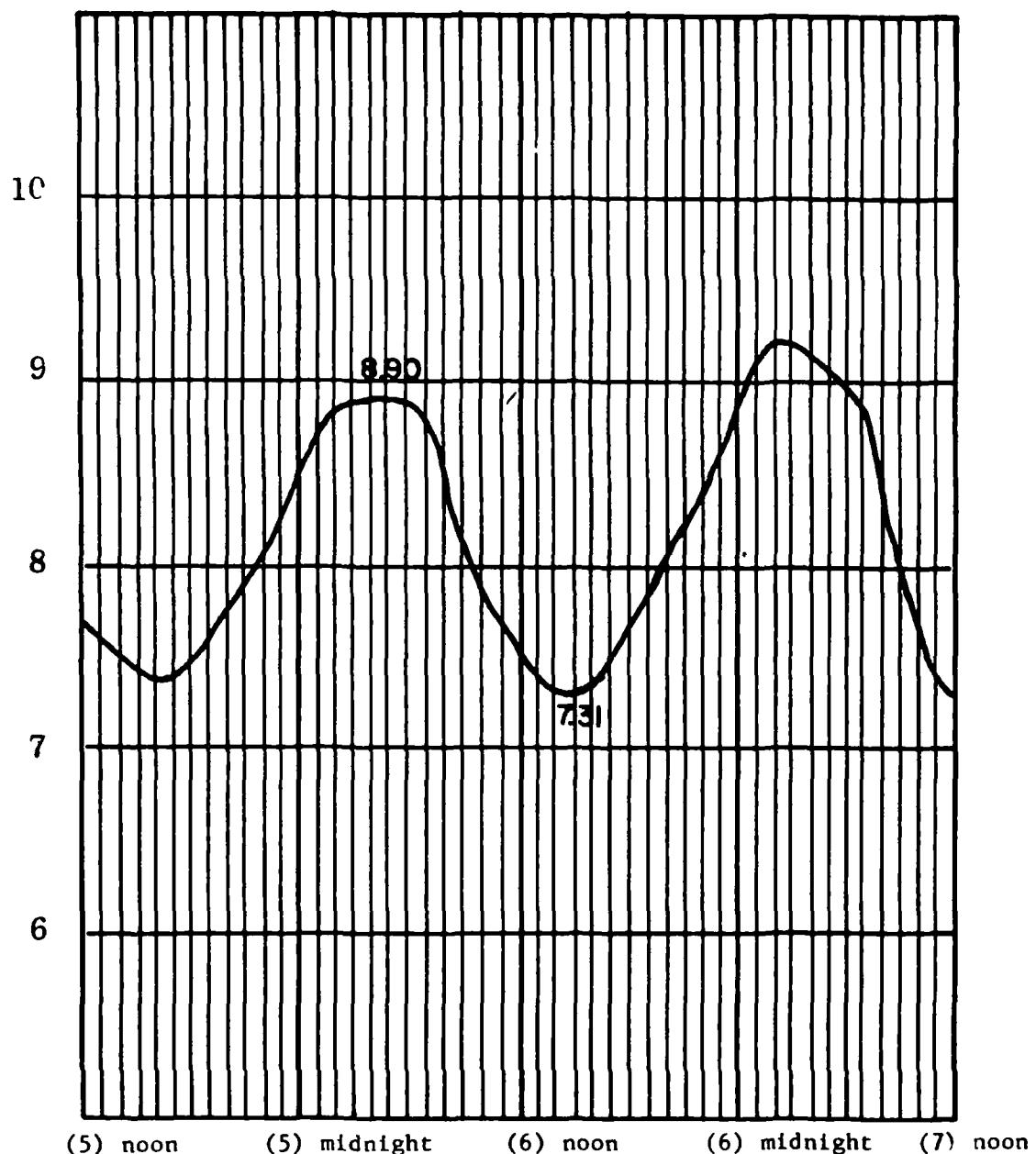


Bon Secour and Cedar Point,
Ala.
5, 6, 7 July 1972

Cedar Point, Ala.
Gage Zero -3.00

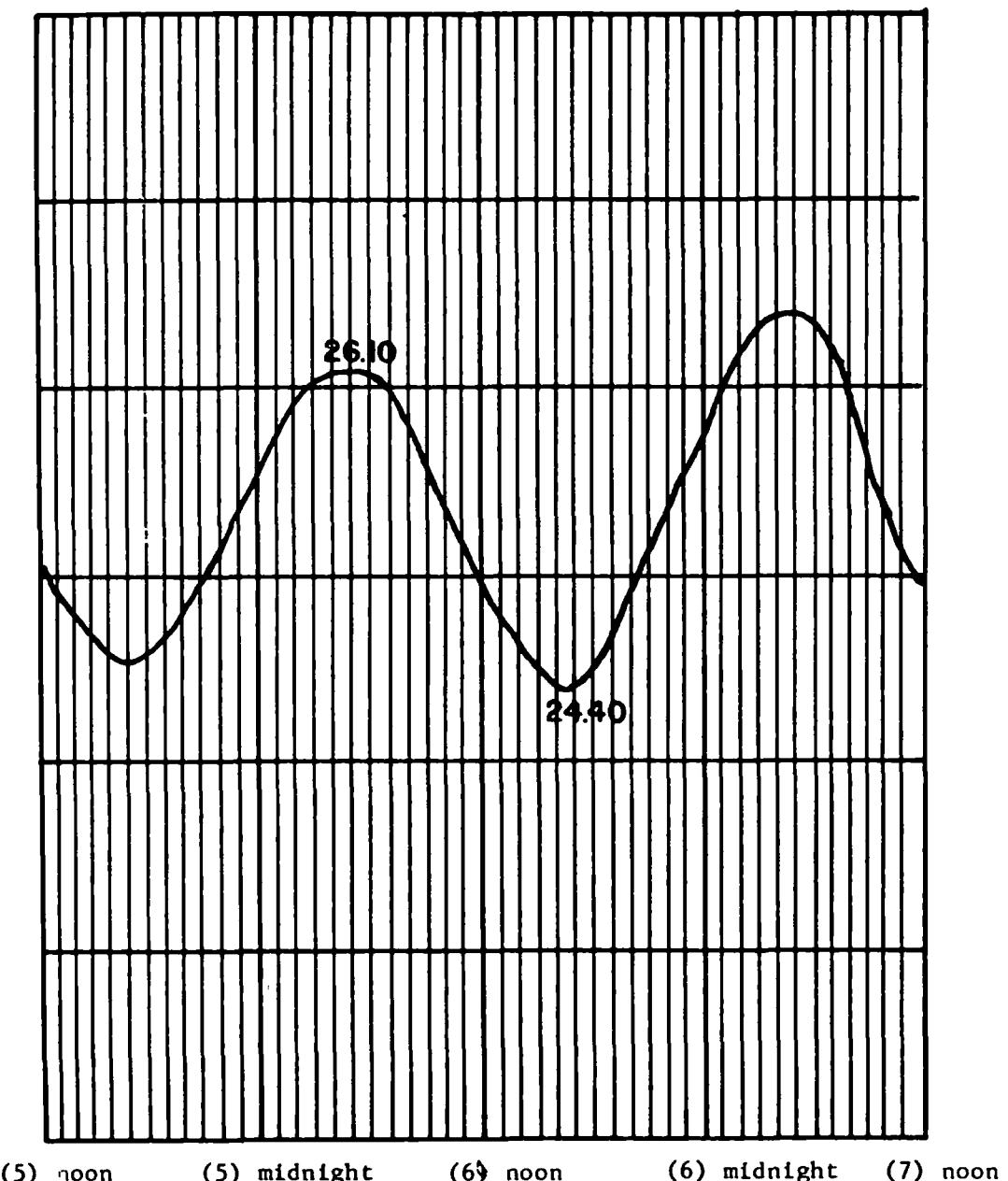


Fowl River Point and Dauphin
Is.Gulf, Ala.
5, 6, 7 July 1972

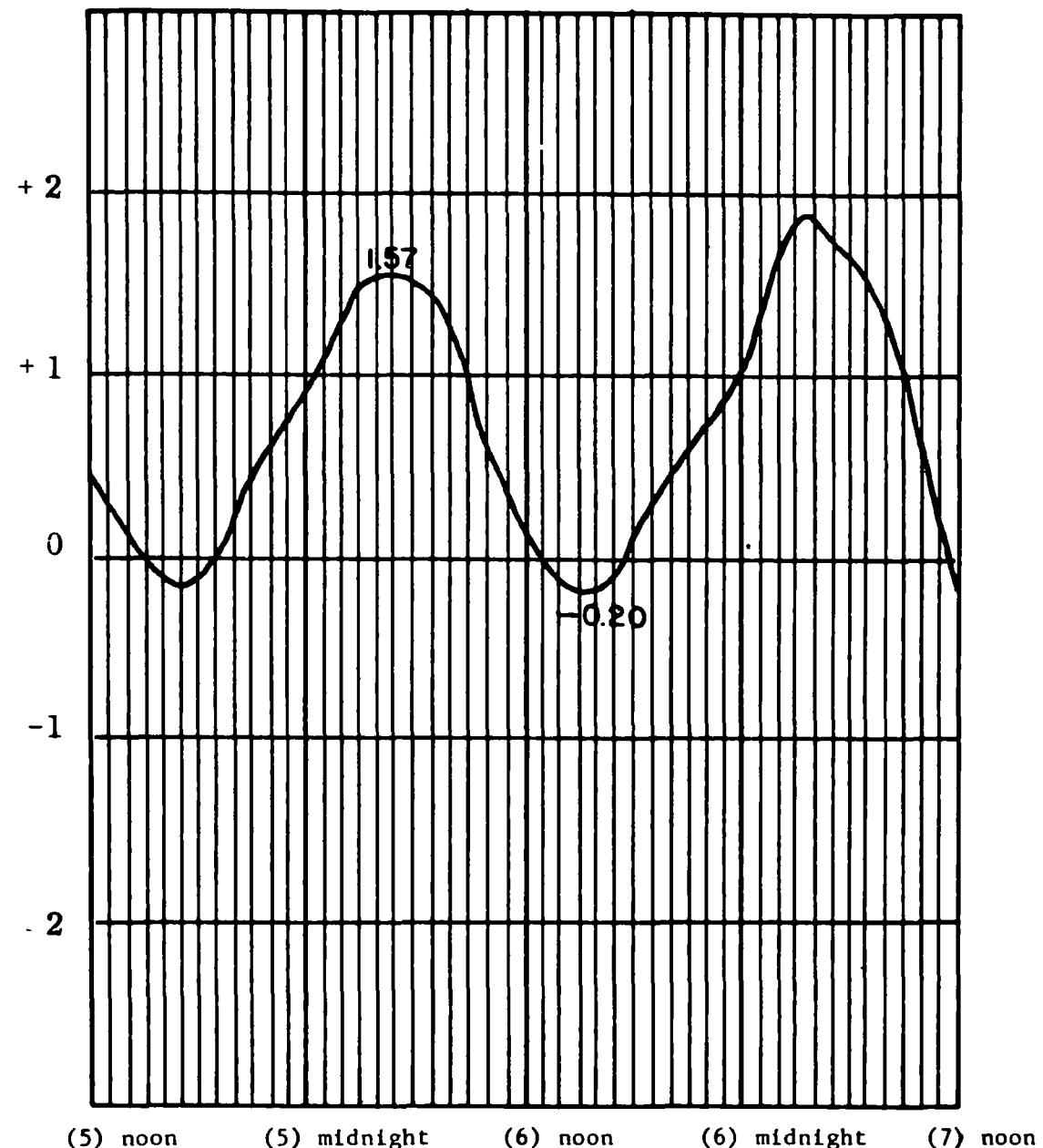


(Source Mobile Corps of Engineers)

FIGURE 9.



Point Clear, Ala.
Gage Zero -25.29



Point Clear and Dauphin
Is. Marine Lab, Ala.
5, 6, 7 July 1972

Dauphin Is. Marine Lab, Ala
Gage Zero -0.23

(Source: Mobile Corps of Engineers)

TABLE 1
STATION LOCATIONS

<u>Station</u>	<u>Location</u>	<u>Station</u>	<u>Location</u>	<u>Station</u>	<u>Location</u>
A-1	30°16'36" 89°21'04"	B-1	30°20'00" 89°07'19"	C-1	30°21'00" 88°53'27"
A-2	30°12'27" 89°21'04"	B-2	30°17'02" 89°07'19"	C-2	30°18'01" 88°53'27"
A-3	30°09'00" 89°21'04"	B-3	30°14'30" 89°07'19"	C-3	30°15'01" 88°53'27"
A-6	30°09'00" 89°18'48"	B-6	30°14'37" 89°04'56"	C-4	30°13'01" 88°53'27"
A-7	30°12'39" 89°18'48"	B-7	30°17'02" 89°04'56"	C-5	30°13'01" 88°51'12"
A-8	30°15'27" 89°18'48"	B-8	30°19'30" 89°04'56"	C-6	30°15'24" 88°51'12"
A-9	30°17'30" 89°16'32"	B-9	30°18'18" 89°02'41"	C-7	30°18'01" 88°51'12"
A-10	30°14'51" 89°16'32"	B-10	30°15'36" 89°02'41"	C-8	30°21'00" 88°51'12"
A-11	30°11'51" 89°16'32"	B-11	30°15'03" 89°02'41"	C-9	30°19'36" 88°48'46"
A-14	30°11'24" 89°14'09"	B-14	30°15'01" 89°00'26"	C-10	30°18'01" 88°48'46"
A-15	30°14'41" 89°14'09"	B-15	30°18'01" 89°00'26"	C-11	30°15'01" 88°48'46"
A-16	30°17'52" 89°14'09"	B-16	30°21'00" 89°00'26"	C-12	30°13'01" 88°48'46"
A-17	30°17'52" 89°11'54"	B-17	30°21'00" 88°57'59"	C-13	30°13'01" 88°46'29"
A-18	30°14'51" 89°11'54"	B-18	30°18'01" 88°57'59"	C-14	30°15'00" 88°46'29"
A-19	30°12'24" 89°11'54"	B-19	30°15'01" 88°57'59"	C-15	30°18'01" 88°46'29"
A-21	30°14'24" 89°09'37"	B-22	30°15'01" 88°55'44"	C-16	30°21'00" 88°46'29"
A-22	30°17'02" 89°09'37"	B-23	30°18'01" 88°55'44"	C-17	30°18'30" 88°44'13"
A-23	30°20'00" 89°09'37"	B-24	30°21'00" 88°55'44"	C-18	30°17'12" 88°44'13"
				C-19	30°15'18" 88°44'13"
				C-20	30°13'01" 88°44'13"
				C-21	30°13'01" 88°41'57"
				C-22	30°15'29" 88°41'57"

TABLE 1
STATION LOCATIONS

17

<u>Station</u>	<u>Location</u>	<u>Station</u>	<u>Location</u>	<u>Station</u>	<u>Location</u>
C-23	30°18'01" 88°41'57"	D-22	30°12'43" 88°27'57"	F-7	30°19'48" 88°01'39"
C-24	30°20'00" 88°41'57"	D-23	30°15'43" 88°27'57"	F-8	30°21'46" 88°01'22"
D-1	30°20'00" 88°30'30"	D-24	30°18'42" 88°27'57"	F-9	30°23'46" 88°01'07"
D-2	30°17'00" 88°30'30"	E-6	30°12'43" 88°23'25"	F-10	30°25'47" 88°00'50"
D-3	30°14'36" 88°30'30"	E-7	30°15'43" 88°23'25"	F-11	30°30.9'N 88°01.4'W
D-6	30°15'04" 88°37'13"	E-8	30°18'42" 88°23'25"	F-12	30°37.1'N 88°02.0'W
D-7	30°17'00" 88°37'13"	E-9	30°20'24" 88°21'09"	O (MTF)	30°21'26.5"N 89°34'58.5"W
D-8	30°20'00" 88°37'13"	E-10	30°17'27" 88°21'09"	Target Pond)	
D-9	30°19'42" 88°34'57"	E-11	30°14'28" 88°21'09"		
D-10	30°16'43" 88°34'57"	E-22	30°15'54" 88°14'30"		
D-11	30°13'42" 88°34'57"	E-23	30°18'56" 88°14'30"		
D-13	30°12'30" 88°32'40"	E-24	30°21'57" 88°14'30"		
D-14	30°13'42" 88°32'40"	F-1	30°07'57" 88°03'28"		
D-15	30°16'43" 88°32'40"	F-2	30°09'56" 88°03'12"		
D-16	30°19'42" 88°32'40"	F-3	30°11'54" 88°02'45"		
D-17	30°17'54" 88°30'24"	F-4	30°13'52" 88°02'28"		
D-18	30°16'12" 88°30'24"	F-5	30°15'51" 88°02'12"		
D-19	30°13'14" 88°30'24"	F-6	30°17'51" 88°01'56"		

TABLE 2
JUNE 29, 1972

18

STATION NUMBER	TIME CDT	MISSISSIPPI SOUND V FIELD AND LABORATORY MEASUREMENTS													REMARKS
		WATER TEMP DEG C	CHLO PH A MG/M3	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISU	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	WOTL NO.	
		DEG C	MG/M3	PTS/K	DG C	PERCT	DIR DEG	KN	VISU	FT	KN	DIR DEG	FT	NO.	
1	1230	29.5	*****	13.21	32.0	61.6	230	7	3.0	1.0	*****	200	8.0	A1-7	POS BY RADR
2	1315	29.4	*****	9.79	32.1	67.6	240	10	2.0	1.0	*****	275	11.0	A1-8	
3	1400	29.9	*****	15.83	32.1	65.1	240	10	3.0	2.0	*****	230	12.0	A1-9	
6	1015	28.9	*****	13.56	29.8	77.0	255	12	3.0	2.0	*****	240	*****	A1-4	
6	1445	30.1	*****	18.51	32.8	65.4	240	10	3.0	2.0	*****	255	11.0	A1-10	
7	1100	28.9	*****	12.26	31.0	77.3	255	11	3.0	2.0	*****	170	12.0	A1-5	
7	1530	29.8	*****	14.97	34.8	65.1	240	10	3.0	1.0	*****	150	12.0	A1-11	
8	1145	28.9	*****	13.50	32.1	70.6	240	8	3.0	1.0	*****	240	8.0	A1-6	
8	1615	29.3	*****	13.22	27.7	79.8	****	18	2.5	2.0	*****	210	8.0	A1-12	
9	800	28.7	*****	13.44	28.2	87.5	240	6	2.0	1.0	.15	270	11.0	A1-1	
10	845	28.5	*****	16.01	29.6	87.6	245	9	3.0	1.5	.15	280	15.0	A1-2	
11	930	28.8	*****	17.89	30.0	83.9	260	11	3.5	2.0	.37	270	10.0	A1-3	
14	1345	29.7	*****	22.32	30.8	70.6	270	15	4.0	3.0	.31	260	18.0	A2-7	
15	1245	29.5	*****	18.17	30.7	77.3	260	14	4.0	2.5	*****	***	8.0	A2-11	
16	1200	29.3	*****	15.76	31.4	70.3	270	8	3.0	2.0	.68	245	10.0	A2-9	
17	1125	29.2	*****	17.45	31.5	70.3	270	8	3.0	2.0	*****	***	12.0	A2-1	

TABLE 2
JUNE 29, 1972
MISSISSIPPI SOUND V

STAT NUMB	TIME CDT	FIELD AND LABORATORY MEASUREMENTS												WATER DEPTH FT	BOTT NO.	REMARKS
		WATER TEMP DEG C	CHLO PH A MG/M3	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECM VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG				
A17	1540	30.0	*****	18.50	27.8	79.6	5	20	3.0	3.0	.37	210	10.0	A2-12		
A18	1045	25.0	*****	20.34	30.3	73.8	270	15	4.0	3.0	*****	***	13.0	A2-3		
A18	1500	29.7	*****	20.69	31.8	62.0	270	6	4.0	1.5	.23	40	13.0	A2-5		
A19	1005	28.7	*****	24.28	28.6	80.3	260	15	5.0	3.0	.59	320	15.0	A2-2		
A19	1425	28.9	*****	22.59	30.8	67.3	250	8	5.0	1.5	*****	***	18.0	A2-4		
A21	905	28.6	*****	21.48	28.6	80.5	280	12	4.0	2.0	.22	45	11.0	A2-10		
A22	830	28.6	*****	20.30	28.4	84.0	270	10	2.0	2.0	*****	***	14.0	A2-6		
A21	740	28.3	*****	16.50	27.9	87.6	260	10	1.0	2.0	*****	***	7.0	A2-8		
B1	630	29.0	*****	17.65	27.5	91.6	240	8	*****		*****	90	9.0	B1-1	WATER HAZEL	
B2	705	28.0	*****	21.34	31.0	91.6	240	12	3.0		.68	240	12.0	B1-2	WATER MUDDY	
B3	750	27.5	*****	26.42	26.0	87.6	240	10	2.4		*****	210	13.0	B1-3	WATER CLEAR	
B6	815	27.0	*****	31.60	26.0	83.9	240	8	2.0		.36	60	9.0	B1-6	WATER CLEAR	
B6	1055	28.5	*****	27.50	31.0	67.6	270	8	3.0		.19	210	10.0	B2-6	WATER CLEAR	
B7	845	28.0	*****	23.58	28.0	80.3	290	7	2.0		.49	80	13.0	B1-7		
B7	1130	29.0	*****	28.74	32.0	74.3	260	8	2.0		.25	210	11.0	B2-7		
B8	910	28.0	*****	18.51	29.0	70.0	270	6	1.0		.37	210	9.0	B1-8	WATER MUDDY	

Invalid

TABLE 2
JUNE 29, 1972

MISSISSIPPI SOUND V

STAT NUMB	TIME COT	FIELD AND LABORATORY MEASUREMENTS										WATER DEPTH FT	BOTL NO.	REMARKS
		WATER TEMP DEG C	CHLO PH A MG/M3	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN			
88	1150	28.0	*****	18.71	32.0	70.9	275	5		1.0	.19	210	8.0	B2-8
89	925	28.0	*****	19.49	30.0	70.3	270	5		1.0	.25	210	9.0	B1-9
810	950	28.5	*****	20.11	29.0	67.6	270	6	invalid	1.4	.19	210	10.0	B1-10
811	1025	28.5	*****	28.40	30.0	74.0	250	6		2.4	.25	210	15.0	B1-11
814	910	27.9	*****	30.41	30.0	80.3	245	12	5.5	2.5	.49	20	15.0	10
815	855	28.5	*****	26.49	29.8	84.0 -37-3-	245	11	7.5	2.5	.16	360	12.0	7
816	750	27.6	*****	19.85	29.5	84.0 1-1-8-4	250	10	1.0	2.0	.23	65	10.0	1
817	1100	29.2	*****	24.54	34.0	67.6	245	7	2.0	1.5	.21	45	11.0	9
817	1430	29.0	*****	23.35	37.0	61.3	250	6	3.0	3.0	.39	60	11.0	4
818	1030	28.9	*****	26.15	30.2	77.0	260	8	4.5	2.5	.30	45	13.0	11
818	1400	28.5	*****	30.39	31.3	67.0	230	6	6.5	2.5	.42	50	13.0	6
819	940	27.8	*****	30.11	29.8	80.5	270	11	7.5	2.0	.28	30	17.0	3
819	1315	28.9	*****	29.44	30.4	76.8	245	6	7.0	2.0	.25	45	17.0	2
822	1245	29.0	*****	28.34	30.8	67.3	245	7	5.0	2.5	.23	62	13.0	12
823	1215	29.0	*****	26.24	30.0	73.5	245	8	5.0	3.0	.25	70	12.0	5
824	1130	29.3	*****	23.35	33.1	58.6	243	6	2.5	2.0	.25	73	10.0	8

TABLE 2
JUNE 29, 1972

STAT NUMB	TIME CDT	MISSISSIPPI SOUND V													REMARKS		
		FIELD AND LABORATORY				MEASUREMENTS											
		WATER TEMP DEG C	CHLO PH A MG/M3	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECN VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BOTL NO.			
C1	800	27.8	*****	22.84	27.8	83.7	265	22	1.5	2.5	.39	100	10.0	C1-1			
C2	845	28.6	*****	27.04	28.4	83.9	265	20	2.0	2.5	.40	100	10.0	C1-2			
C3	950	28.5	*****	30.92	28.5	83.9	260	20	6.5	2.0	.19	70	9.0	C1-3			
C6	1020	27.3	*****	33.66	28.5	80.3	250	19	3.5	2.0	.47	30	9.0	C1-4			
C6	1445	29.1	*****	31.16	31.5	70.3	260	12	6.0	1.0	*****	***	8.0	C1-10			
C7	1100	28.9	*****	29.42	29.0	80.5	265	15	4.0	1.5	*****	70	12.0	C1-5			
C8	1145	29.2	*****	24.41	29.3	77.0	265	23	1.5	1.5	*****	***	15.0	C1-6			
C8	1535	29.3	*****	22.49	26.9	83.3	240	20	2.0	2.0	*****	***	8.0	C1-12			
C9	1230	29.3	*****	24.13	30.2	80.5	265	24	2.5	2.5	*****	***	14.0	C1-7			
C10	1315	29.3	*****	27.08	31.5	77.0	265	20	2.5	1.5	*****	***	17.0	C1-8			
C11	1400	28.7	*****	32.13	30.6	77.0	265	18	7.0	2.0	*****	***	10.0	C1-9			
C14	930	27.7	*****	31.72	29.2	84.0	270	18	6.0	3.0	.42	90	6.0	C28			
C15	845	28.5	*****	25.89	28.9	84.0	270	22	2.0	3.0	.63	90	12.0	C22			
C14	800	28.4	*****	21.41	29.3	84.0	270	20	.5	1.5	.21	90	8.0	C24			
C17	1145	28.9	*****	24.57	31.2	74.0	250	18	1.5	1.0	.47	80	5.0	C27			
C18	1100	28.9	*****	28.81	30.8	77.3	270	10	2.5	1.0	.63	90	16.0	C211			

TABLE 2
JUNE 29, 1972

MISSISSIPPI SOUND V

STAT NUMB	TIME CDT	FIELD AND LABORATORY MEASUREMENTS												WATER DEPTH FT	WATL NU.	REMARKS
		WATER TEMP DEG C	CHLO PH A MG/M3	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG				
C19	1015	28.4	*****	30.37	29.6	80.7	280	18	6.0	2.0	.33	100	12.0	C212		
C19	1445	29.4	*****	30.54	32.8	70.6	250	10	7.0	1.5	.37	85	6.0	C29		
C22	1400	29.4	*****	28.44	32.2	70.9	265	14	5.0	1.0	.37	90	12.0	C210		
C23	1350	29.3	*****	23.62	32.3	74.3	250	16	1.5	1.5	.44	90	15.0	C26		
C24	1230	29.4	*****	23.56	31.8	74.3	240	15	1.0	1.0	.30	85	4.5	C23		
D1	753	28.2	*****	30.36	27.2	80.0	250	12	1.5	2.0	.26	300	6.0	D1-12		
D1	1100	29.2	*****	*****	29.6	80.0	250	8	1.5	1.0	.47	90	6.0	D1-5		
D2	825	28.2	*****	*****	27.3	80.3	250	12	2.5	2.0	.25	300	14.0	D1-3		
D2	1130	29.7	*****	25.74	30.5	80.3	260	8	3.5	1.0	.13	165	14.0	D1-10		
D3	900	28.6	*****	28.52	28.3	80.3	270	12	7.5	2.5	*****	***	16.0	D1-7		
D3	1200	29.5	*****	27.55	30.4	80.3	260	8	7.0	1.0	.23	155	18.0	D1-8		
D6	930	28.5	*****	29.56	27.9	91.7	270	10	7.0	2.0	*****	***	11.0	D1-11		
D6	1230	29.7	*****	28.31	30.6	76.8	260	10	6.5	1.5	.19	160	10.0	D1-1		
D7	950	28.7	*****	30.57	29.0	73.5	270	12	3.0	2.0	.26	315	10.0	D1-4		
D7	1300	29.3	*****	28.69	30.5	73.5	260	10	2.5	1.5	.21	160	10.0	D1-6		
D8	1015	29.0	*****	24.20	29.0	76.8	255	8	1.0	1.5	.34	90	6.5	D1-9		

TABLE 2
JUNE 29, 1972

MISSISSIPPI SOUND V

STAT NUMB	TIME COT	FIELD AND LABORATORY MEASUREMENTS													REMARKS
		WATER TEMP DEG C	CHLO PH A MG/M3	SALNTY PTS/K	AIR TEMP DEG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BOTL NO.	
D8	1315	30.1	•••••	24.46	30.8	91.7	260	8	1.0	1.0	.32	90	6.0	D1-2	
D9	810	28.0	•••••	23.82	27.6	84.0	300	12	1.0	1.0	.49	80	6.0	12-11	
D9	1230	29.7	•••••	25.22	31.4	67.9	270	15	1.0	1.0	.52	90	6.0	12-8	
D10	845	28.5	•••••	24.70	28.8	80.3	300	16	1.0	2.0	.44	120	10.0	12-3	
D10	1315	29.4	•••••	27.22	31.0	71.2	235	15	1.0	1.5	.44	110	6.0	12-6	
D11	930	28.7	•••••	28.26	28.6	80.5	300	15	7.5	.5	.37	90	25.0	12-4	
D11	1400	29.5	•••••	30.43	32.4	74.0	235	12	6.5	1.0	.30	90	25.0	12-2	
D14	1015	28.8	•••••	••••••	28.8	77.0	270	12	7.0	2.5	.68	90	25.0	12-12	
D14	1445	26.6	•••••	29.76	32.4	71.2	235	12	7.0	1.0	.89	90	25.0	12-10	
D15	1100	28.6	•••••	26.16	29.0	80.7	270	15	3.5	1.5	•••••	•••	10.0	12-1	
D15	1530	29.6	•••••	••••••	32.3	71.2	••••	12	1.0	2.0	.34	90	10.0	--	
D16	1145	29.3	•••••	22.99	30.8	74.0	270	15	2.0	1.0	.38	90	6.0	12-9	
D16	1615	29.7	•••••	••••••	32.4	71.2	••••	12	1.0	2.0	.34	90	•••••	-	
D17	845	28.0	•••••	22.61	31.0	76.6	270	12	2.0	2.0	•••••	•••	10.0	D-2-3	
D17	1335	30.0	•••••	23.11	38.0	77.3	270	12	1.5	2.0	.48	90	10.0	D-2-8	
D18	1005	28.0	•••••	28.76	32.0	77.9	270	8	4.5	2.0	.49	90	16.0	D-2-4	

TABLE 2

JUNE 29, 1972

MISSISSIPPI SOUND V

STAT NUMB	TIME	WATER TEMP	CHLO PH A	SALNTY	FIELD AND LABORATORY MEASUREMENTS								WATER DEPTH FT	BUTL NO.	REMARKS	
					AIR TEMP	RELAT HUMDY	WIND DIR	WIND SPD	SECH VISB	SEA STAT	CURRT	CUR DIR DEG				
CDT	DEG C	MG/M3	PTS/K	DG C	PERCT	DEG	KN	FT	FT	KN	DIR	DEG	DIR	DEG	FT	
D18	1410	••••	•••••	27.39	••••	74.0	270	12	4.0	2.0	.46	90	16.0	D-2-9		
U19	1050	28.0	•••••	34.95	32.0	77.5	270	12	7.0	2.0	•••••	•••	11.0	D-2-5		
D19	1450	••••	•••••	31.78	••••	77.3	270	12	7.5	2.0	.22	105	11.0	D2-10		
D22	1130	29.0	•••••	34.28	34.0	77.5	270	12	7.5	1.0	.21	90	17.0	D-2-7		
D22	1520	••••	•••••	33.23	••••	80.3	90	12	7.5	2.0	.25	270	17.0	D-2-1		
D21	1200	29.0	•••••	28.43	36.0	80.9	270	12	4.5	1.0	•••••	•••	17.0	D2-11		
D23	1550	••••	•••••	28.17	••••	80.3	90	12	5.5	2.0	.30	90	17.0	D-2-6		
D24	1245	30.0	•••••	24.83	36.0	81.2	270	12	2.5	1.0	.53	52	7.0	D-2-2		
D24	1620	••••	•••••	24.75	••••	83.9	90	12	2.0	2.0	.32	90	7.0	D2-12		
E6	1127	28.4	•••••	29.89	31.4	80.7	260	18	8.0	3.0	.34	100	8.0	E1-6		
E7	1147	28.8	•••••	28.52	32.4	80.9	250	16	5.0	3.0	.37	90	17.0	E1-7		
E8	1210	28.9	•••••	26.14	32.5	77.5	250	18	2.5	4.0	.33	40	14.0	E1-8		
E9	950	28.8	•••••	27.36	30.5	80.3	270	17	2.5	2.5	.37	60	12.0	E1-9		
E10	1040	28.6	•••••	29.52	31.0	80.9	270	18	4.0	3.0	.23	45	16.0	E1-10		
E11	1107	28.5	•••••	27.77	31.0	80.9	250	18	12.0	3.0	.20	90	20.0	E1-11		
E22	1100	28.6	•••••	29.29	30.6	83.9	270	20	1.5	5.0	•••••	•••	14.0	E2-6	NO CURRENT	

TABLE 2

JUNE 29, 1972

MISSISSIPPI SOUND V

STAT NUMB	TIME CDT	WATER TEMP DEG C	CHLO PH A MG/M3	SALNTY PTS/K	FIELD AND LABORATORY MEASUREMENTS								WATER DEPTH FT	BOTL NO.	REMARKS
					AIR TEMP DEG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG			
E23	1030	28.8	*****	28.22	30.0	80.3	203	16	1.5	3.0	*****	***	7.0	E2-7	NO CURRENT
E24	1000	27.6	*****	28.43	30.5	79.8	203	16	1.5	1.5	*****	***	4.0	E2-4	NO CURRENT
F1	1230	27.0	*****	32.40*	27.7	83.9	225	15	10.0	4.0	.70	120	60.0	M012	33.57
F2	1205	26.1	*****	33.90*	27.2	83.9	225	18	4.0	4.0	.84	120	47.5	M011	34.89
F3	1145	27.2	*****	33.90*	28.2	77.0	225	18	5.5	3.5	.41	90	30.0	M010	34.69
F4	1123	28.1	*****	32.00*	27.7	77.3	225	18	5.0	3.5	.38	90	9.0	M0-9	32.63
F5	1101	28.3	*****	30.40*	29.4	77.0	225	18	5.0	3.5	.51	90	23.5	M0-8	30.33
F6	1034	28.4	*****	23.30*	28.6	73.8	225	18	5.5	3.5	.65	90	43.5	M0-7	23.03
F7	1015	28.4	*****	22.90*	28.4	73.5	225	18	3.2	3.5	.81	120	16.0	M0-6	17.27
F8	955	28.4	*****	15.30*	28.2	73.5	225	18	2.5	2.5	.23	90	18.5	M0-5	15.12
F9	934	28.5	*****	15.80*	29.0	70.3	225	18	2.0	2.5	.36	90	17.0	M0-4	15.56
F10	914	28.4	*****	15.50*	29.0	67.3	225	20	2.0	2.5	.30	45	16.0	M0-3	15.31
F11	830	28.2	*****	11.80*	28.3	73.8	225	22	2.0	2.5	.28	45	13.0	M0-2	11.54
F12	737	29.1	*****	5.20*	28.3	83.7	225	22	3.0	1.0	*****	***	15.5	M0-1	RS-7B 4.99
0	***	*****	*****	***	***	***	***	***	***	***	***	***	***	***	***
0	***	*****	*****	***	***	***	***	***	***	***	***	***	***	***	***

* RS 5-3 Salinometer

TABLE 3
JUNE 30, 1972

MISSISSIPPI SOUND V

STAT NUMB	TIME CDT	FIELD AND LABORATORY MEASUREMENTS										WATER DEPTH FT	BOTL NO.	REMARKS	
		WATER TEMP DEG C	CHLO MG/M3	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN				
B1	700	27.0	7.0	18.49	28.7	91.5	270	6	1.5	1.0	0.000	000	7.0	B1-1	NO CURRENT
B2	800	28.0	4.3	21.44	28.7	83.7	270	6	2.0	2.5	0.000	000	13.0	B1-2	NO CURRENT
B3	845	28.0	3.6	22.48	28.0	87.6	270	8	4.0	2.0	.09	90	13.0	B1-3	
B6	920	28.0	3.9	23.08	28.5	87.5	270	8	4.0	2.0	.07	90	16.0	B1-4	
B6	1255	28.0	2.3	31.07	29.0	76.8	225	16	8.0	2.5	.25	180	16.0	B1-9	
B7	950	28.3	3.7	23.35	28.5	87.6	270	8	4.0	2.0	0.000	000	16.0	B1-5	SLOW CURRENT
B7	1330	28.5	0.000	26.23	29.5	63.3	225	18	6.0	3.5	.19	180	16.0	B110	
B8	1030	28.3	7.6	19.91	29.0	83.9	270	8	2.0	2.0	0.000	000	8.0	B1-6	
B8	1405	28.5	6.9	20.33	29.1	76.8	225	18	4.0	2.5	0.000	000	8.0	B111	
B9	1115	28.3	12.8	19.24	29.5	80.3	270	7	2.0	1.5	.06	360	10.0	B1-7	
B1n	1210	28.5	2.8	25.63	29.1	76.8	270	12	6.0	3.5	.25	315	19.0	B1-8	
B14	930	28.2	2.5	30.10	27.8	80.0	210	8	5.5	3.0	.25	220	16.0	B212	
B15	845	28.6	2.9	25.75	28.0	80.0	235	8	4.5	2.5	.09	245	11.0	B210	
B14	800	28.1	6.9	21.21	27.8	76.3	235	6	2.0	1.5	.12	65	10.0	B2-9	
B17	1145	28.8	7.2	22.14	28.6	73.5	235	5	2.0	1.5	.15	60	11.0	B2-8	
B17	1450	28.6	2.6	23.68	25.3	74.9	145	1	4.5	1.0	.15	90	0.000	B2-5	

TABLE 3
JUNE 30, 1972
MISSISSIPPI SOUND V

STAT NUMB	TIME CDT	WATER TEMP DEG C	CHLO PH A MG/M3	SALNTY PTS/K	FIELD AND LABORATORY MEASUREMENTS						WATER DEPTH FT	WTL NO.	REMARKS	
					AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISD FT	SEA STAT FT				
B1A	1100	28.5	3.0	25.69	28.6	73.8	240	7	4.5	3.0	.19	240	12.0	B2-4
B1A	1430	28.3	2.7	28.70	23.8	74.9	65	4	3.0	1.5	.21	360	14.0	
B19	1015	28.1	2.6	30.07	28.2	65.9	270	8	7.5	2.5	.25	240	16.0	B211
B19	1355	27.2	1.4	31.86	23.8	70.7	75	5	5.0	1.0	.16	80	00000	B2-1
B22	1335	28.0	2.1	32.03	28.0	76.6	240	6	3.5	2.0	.25	225	14.0	B2-2
B23	1315	28.8	1.8	27.08	24.2	80.3	235	8	5.0	3.5	.13	245	14.0	
B24	1230	28.9	5.1	23.27	28.6	77.0	238	8	3.0	2.5	.11	155	12.0	B2-6
C1	800	28.5	5.4	22.32	27.6	83.7	260	18	2.0	1.0	.37	80	10.0	C1-1
C1	1230	28.8	4.4	23.42	29.2	84.0	245	22	2.0	2.5	00000	000	12.0	C1-7
C2	845	28.1	2.5	27.74	28.1	83.5	260	22	4.5	2.0	.49	90	19.0	C1-2
C2	1315	28.6	2.7	28.93	29.5	83.9	245	25	5.0	3.5	00000	000	20.0	C1-8
C3	930	27.8	1.8	30.14	27.6	87.5	260	20	6.0	1.5	00000	000	12.0	C1-3
C6	1015	26.3	1.6	33.63	27.8	83.7	225	18	6.0	1.0	.52	360	6.0	C1-4
C7	1100	28.5	3.7	27.31	28.6	87.5	255	22	6.0	2.0	00000	000	15.0	C1-5
C8	1145	28.8	3.3	22.99	29.2	84.0	270	20	2.0	1.5	00000	000	9.0	C1-6
C9	810	28.2	5.3	24.23	30.0	70.0	280	9	1.5	2.0	.27	280	8.0	C9-A

TABLE 3
JUNE 30, 1972
MISSISSIPPI SOUND V

STAT NUMB	TIME CDT	WATER TEMP DEG C	CHLO PH A MG/M3	SALNTY PTS/K	FIELD AND LABORATORY MEASUREMENTS										WATER DEPTH FT	BUTL NO.	REMARKS
					AIR TEMP DEG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG					
C9	1250	29.0	8.7	21.45	31.7	73.2	240	12	1.5	2.0	0.000	000	5.0	C9-B	BLACKSKY		
C10	900	28.3	2.8	27.58	29.1	70.0	200	9	8.0	2.0	0.000	000	15.0	C10-A			
C10	1320	28.4	4.9	25.61	28.2	76.3	300	0.000	1.5	2.0	0.000	000	12.0	C10-B	BLACKSKY		
C11	940	26.9	0.000	32.52	29.0	83.7	250	8	12.0	1.5	0.000	000	20.0	C11-A			
C14	930	28.0	1.9	29.59	30.0	83.9	260	11	9.0	2.0	0.56	90	32.0	C2-3			
C14	1020	26.9	0.3	32.14	30.1	76.6	260	8	12.0	2.0	0.000	000	15.0	C14-A	1/2M150FC14		
C14	1400	28.2	1.5	30.02	24.4	74.3	10	15	10.0	2.7	0.77	180	32.0	C2-9			
C15	845	28.4	2.6	24.20	28.9	76.6	260	11	3.0	2.0	0.39	95	15.0	C2-2	BOUYC1		
C15	1105	28.6	5.5	24.41	31.1	66.6	270	9	3.5	1.0	0.000	000	10.0	C15-A			
C15	1315	29.0	2.1	26.76	29.1	76.6	310	14	6.5	2.5	1.03	90	15.0	C2-8	BOUYC1		
C16	800	28.1	11.0	21.10	27.8	80.0	260	8	1.0	1.0	0.22	10	6.0	C2-1	SHRIMPING		
C16	1145	29.3	11.0	21.53	32.2	73.2	230	11	2.0	0.000	0.000	000	8.0	C16-A			
C16	1230	28.9	9.3	21.77	30.0	80.5	260	13	1.5	1.5	0.63	90	6.0	C2-7			
C17	1145	28.7	4.0	24.24	31.0	73.5	260	10	1.5	2.0	0.69	85	7.0	C2-6			
C17	1615	28.4	6.4	24.90	24.8	82.9	300	22	3.0	1.0	0.97	100	7.0	C2-12			
C18	1100	28.5	2.6	25.00	28.4	83.9	260	11	6.0	2.0	1.31	90	10.0	C2-5			

TABLE 3
 JUNE 30, 1972

STAT NUMB	TIME CDT	WATER TEMP DEG C	CHLO PH A MG/M3	SALNTY PTS/K	FIELD AND LABORATORY MEASUREMENTS										WATER DEPTH FT	BUTL NO.	REMARKS
					AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG					
C1A	1530	28.4	7.0	26.23	25.7	74.7	0000	0000	5.0	0000	.09	120	16.0	C2-11			
C19	1015	28.0	1.8	29.40	28.2	83.9	260	11	7.0	1.0	.89	110	10.0	C2-4			
C19	1445	28.3	1.3	28.68	24.3	82.3	0000	0000	8.0	.5	.32	180	10.0	C2-10			
D1	927	28.5	0000	28.31	27.2	76.8	270	16	1.5	2.0	.17	90	0000	D1-1	7080OVERCAST		
D2	905	28.4	4.5	26.96	26.4	80.5	270	16	4.5	2.0	.21	90	0000	D1-2	8080OVERCAST		
D3	840	28.5	2.6	28.72	26.7	83.9	270	12	8.5	1.0	.20	90	0000	D1-3			
D6	1030	28.5	8.7	25.80	28.0	84.0	270	14	4.0	2.5	.19	100	0000	D1-6	9080OVERCAST		
D6	1235	28.7	3.3	27.77	28.3	77.3	270	18	5.0	2.0	.21	90	0000	D1-68	02080OVERCAST		
D7	1015	28.5	4.4	26.26	29.0	84.0	270	14	4.0	2.0	.25	100	0000	D1-7	9080OVERCAST		
D7	1215	28.9	4.4	26.77	28.8	77.3	270	18	5.0	2.0	.37	90	0000	D1-78	07080OVERCAST		
D8	950	28.5	12.1	23.50	27.4	80.5	270	14	1.0	2.0	.27	60	0000	D1-8	3080OVERCAST		
D8	1148	28.0	8.8	23.31	29.6	80.5	270	12	2.0	2.0	.34	90	0000	D1-88	09080OVERCAST		
D9	1130	27.5	0000	23.84	31.2	76.8	270	12	1.0	2.0	.25	90	0000	D1-7	10080OVERCAST		
D10	1110	28.6	7.9	25.66	29.5	76.8	270	12	3.5	2.0	.21	90	0000	0-00	10080OVERCAST		
D11	1053	28.3	1.9	28.04	28.5	80.3	270	12	8.0	2.0	.25	90	0000	D1-11	10080OVERCAST		
D11	1335	28.5	1.5	28.29	29.0	83.9	270	16	7.5	1.0	.32	90	0000	D1-38	STORMCOMING		

TABLE 4
JULY 6, 1972

STAT NUMB	TIME CDT	MISSISSIPPI SOUND V FIELD AND LABORATORY MEASUREMENTS													REMARKS
		WATER TEMP DEG C	CHLO PH A MG/M3	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BOTL NO.	
0	1118	28.0	7.3	*****	27.2	54.5	****	****	****	****	****	***	****	1	Mississippi Test Facility Target Pond
C1	800	27.5	.3	*****	22.5	81.6	30	5	***	1.5	.09	200	10.0	C1-9	HAZY
C1	1230	28.4	4.1	*****	26.5	49.1	90	2	5.0	.5	.20	165	10.0	C1-7	
C2	845	27.0	*****	*****	23.5	77.9	45	6	6.5	3.5	.25	15	14.0	C1-8	HAZY
C2	1315	28.1	2.4	*****	26.7	49.1	90	2	6.5	.5	.27	260	14.0	C1-3	
C3	930	27.2	3.3	30.58	24.3	74.0	25	8	6.5	4.0	.25	25	19.0	C1-10	
C3	1400	28.3	1.8	29.92	27.4	49.1	75	1	7.0	.5	****	***	19.0	C1-6	
C4	610	25.7	.8	33.27	22.5	82.1	70	18	12.0	3.5	.56	270	27.0	C4-1	CLEAR SKIES
C4	1545	28.5	1.0	32.74	31.0	64.8	90	4	12.0	.5	.15	240	26.0	C4-11	FLYOVER C-130
C5	847	25.6	.7	33.44	22.6	77.9	70	16	12.0	3.5	.44	270	26.0	C4-2	CLOUDY TOW
C5	1500	27.8	1.0	*****	30.5	58.8	90	4	12.0	1.0	.19	240	30.0	C4-10	CLEAR SKIES
C6	1015	26.1	2.6	31.58	24.5	59.5	40	6	9.0	1.5	.23	210	16.0	C1-1	
C6	1445	28.1	1.8	*****	26.4	57.4	65	2	6.0	.5	.23	150	16.0	C1-5	
C7	1100	27.4	3.7	29.30	25.1	56.9	55	4	5.0	1.5	.42	210	13.0	C1-2	
C7	1530	29.1	3.4	*****	28.4	52.8	120	2	6.0	.5	.27	230	12.0	C1-12	
C8	1145	28.0	6.0	*****	26.4	49.1	45	3	4.0	.5	.25	175	10.0	C1-4	

TABLE 4

JULY 6, 1972

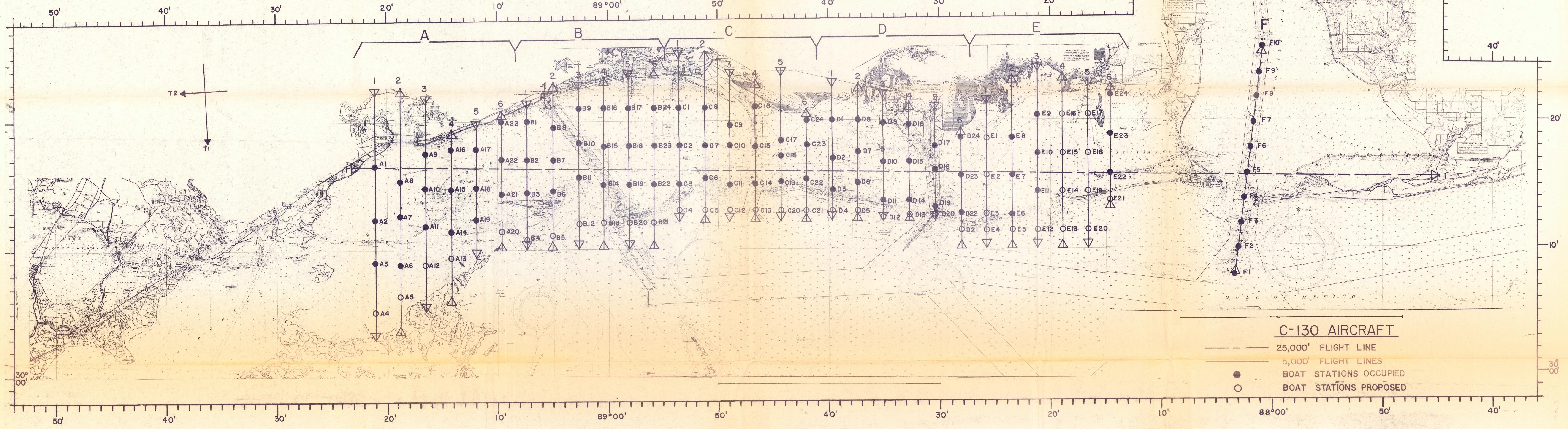
MISSISSIPPI SOUND V

STAT NUMB	TIME CDT	WATER TEMP DEG C	CHLO PH A MG/M3	SALNTY PTS/K	FIELD AND LABORATORY MEASUREMENTS								WATER DEPTH FT	BUTL NO.	REMARKS
					AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECN VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG			
C8	1600	29.0	5.9	26.43	26.9	50.7	140	2	4.0	.5	*****	***	9.0	C1-11	FLYOVER
C9	800	25.4	1.0	27.90	22.4	77.6	30	8	4.0	1.0	.37	240	8.0	C201	
C9	1230	28.0	9.7	25.17	25.4	50.2	75	4	4.0	.5	.40	65	10.0	C207	
C10	845	26.8	2.9	27.09	23.3	77.9	210	8	7.0	1.0	.37	350	7.0	C202	FLYOVER
C10	1315	28.4	.8	26.97	27.8	56.0	90	5	4.0	.7	.44	240	8.0	C208	
C11	930	26.5	2.1	29.78	23.9	70.4	50	10	8.0	1.1	.81	240	8.0	C203	
C11	1400	27.6	1.4	28.91	26.5	53.3	120	6	8.0	.7	1.11	220	8.0	C209	
C12	932	26.8	.7	32.74	23.6	66.5	70	18	12.0	4.0	.44	270	35.0	C4-3	NOCURRENT
C12	1415	27.8	1.1	29.78	31.4	58.3	90	8	11.0	1.5	.22	225	34.0	C4-9	CLEARSKIES
C13	1013	26.9	.5	*****	24.7	70.7	70	16	12.0	3.0	.44	270	28.0	C4-4	NOCURRENT
C13	1330	27.0	.7	32.39	29.5	55.0	90	12	12.0	2.0	.44	270	29.0	C4-8	NOCURRENT
C14	1015	27.3	1.6	27.86	24.7	70.4	60	8	10.0	.9	.81	270	33.0	C204	
C14	1445	28.5	1.6	27.74	31.2	54.7	140	4	10.0	.3	.63	250	33.0	C210	FLYOVER
C15	1100	27.6	5.0	27.01	27.0	55.0	75	8	10.0	.8	.56	270	15.0	C205	
C15	1530	29.1	7.5	25.74	29.5	47.0	130	6	6.0	.3	.37	270	15.0	C211	
C16	1145	28.0	5.0	25.62	26.2	56.0	75	5	4.0	.5	.34	120	9.0	C206	

TABLE 4
JULY 6, 1972
MISSISSIPPI SOUND V

MISSISSIPPI SOUND V

ERTS- A

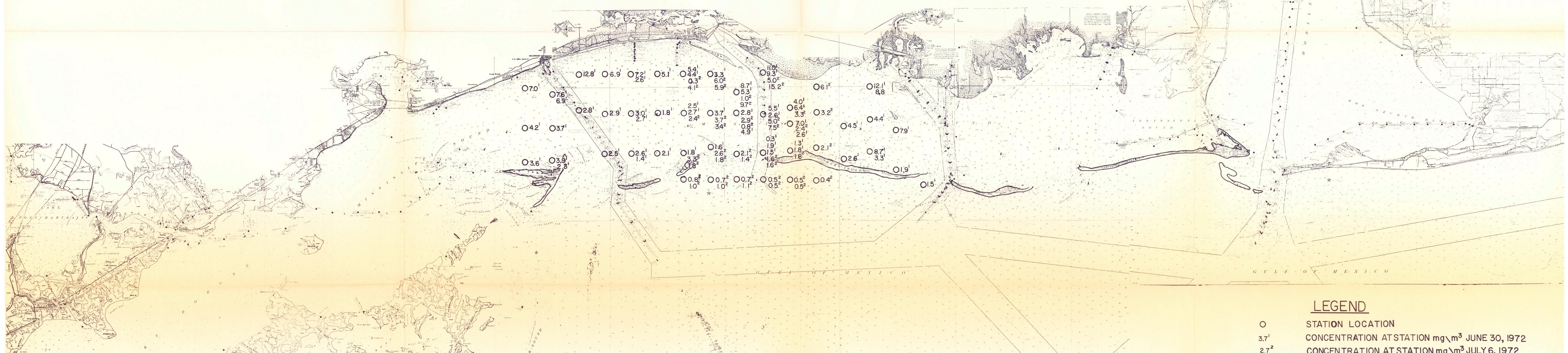


MISSISSIPPI SOUND V

ERTS-A

CHLOROPHYLL

JUNE 30, 1972
JULY 6, 1972

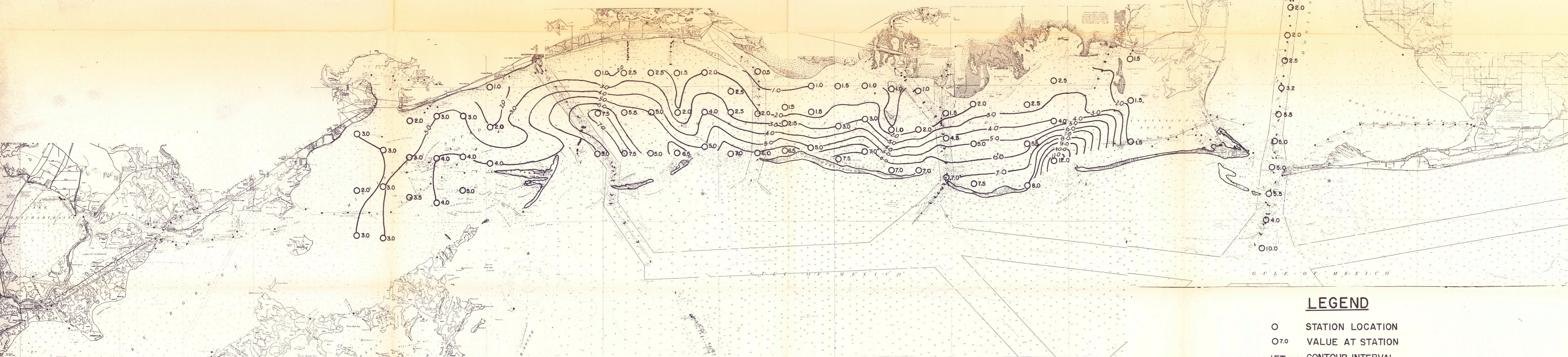


MISSISSIPPI SOUND V

ERTS-A

SECCHI VISIBILITY

29 JUNE, 1972



LEGEND

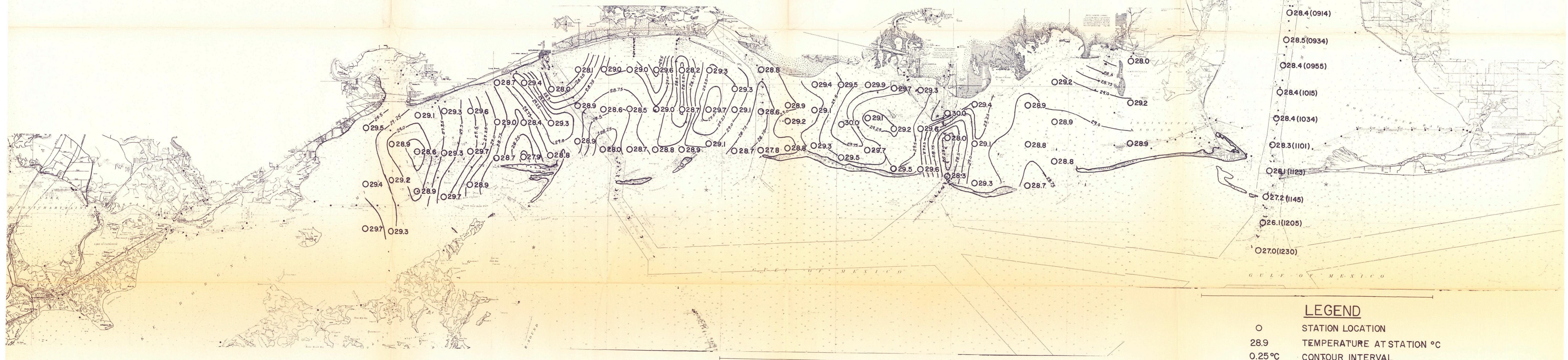
- STATION LOCATION
- 7.0 VALUE AT STATION
- IFT CONTOUR INTERVAL

MISSISSIPPI SOUND V

ERTS-A

TEMPERATURE

1200 CDT JUNE 29, 1972

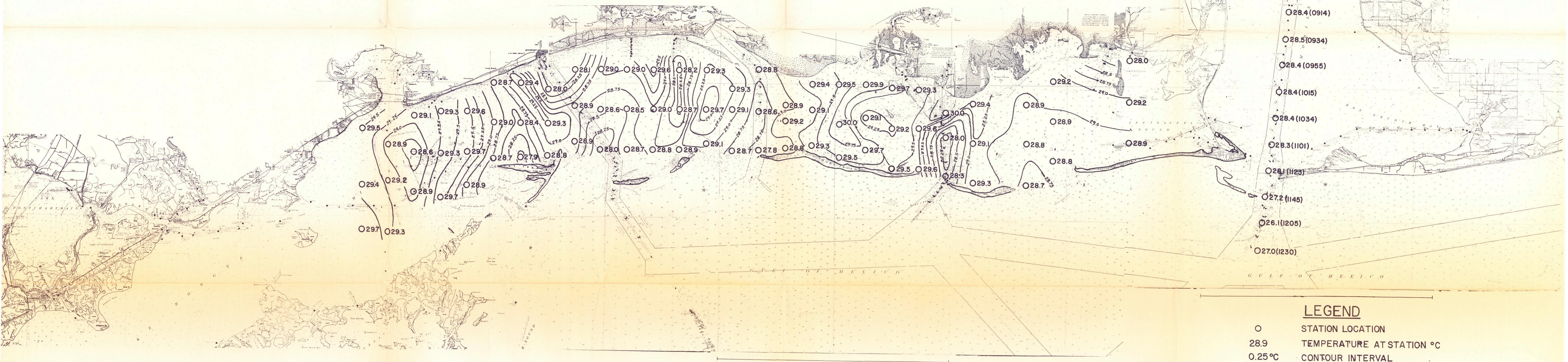


MISSISSIPPI SOUND V

ERTS-A

TEMPERATURE

1200 CDT JUNE 29, 1972



MISSISSIPPI SOUND V

ERTS-A

SALINITY

JUNE 29, 1972

